# EXHIBIT G

## California State Lands Commission Presurvey Notice Requirements for Permittees to Conduct Geophysical Survey Activities

All parts of the Presurvey Notice must be adequately filled out and submitted to the CSLC staff a minimum of twenty-one (21) calendar days prior to the proposed survey date to ensure adequate review and approval time for CSLC staff. Note that one or more of the items may require the Permittee to plan well in advance in order to obtain the necessary documentation prior to the Notice due date (e.g., permits from other State or Federal entities).

Please use the boxes below to verify that all the required documents are included in the Presurvey Notice. If "No" is checked for any item, please provide an explanation in the space provided. If additional space is needed, please attach separate pages.

| Yes | No | |
|---|---|---|
| ☑ | ☐ | Geophysical Survey Permit Exhibit F |
| ☑ | ☐ | Survey Location (including a full-sized navigation chart and GPS coordinates for each proposed track line and turning point)<br>Explanation: attached and shape file provided |
| ☐ | ☑ | Permit(s) or Authorization from other Federal or State agencies (if applicable)<br>Explanation: No other required |
| ☑ | ☐ | 21-Day Written Notice of Survey Operations to Statewide Geophysical Coordinator/ |
| ☑ | ☐ | U.S. Coast Guard Local Notice to Mariners/ |
| ☑ | ☐ | Harbormaster and Dive Shop Notifications<br>Explanation: delivered |
| ☑ | ☐ | Marine Wildlife Contingency Plan<br>Explanation: attached |
| ☑ | ☐ | Oil Spill Contingency Plan<br>Explanation: attached |
| ☐ | ☑ | Verification of California Air Resources Board's Tier 2-Certified Engine Requirement<br>Explanation: Detroit Diesel 16V-71 see attached vessel spec sheet |
| ☐ | ☑ | Verification of Equipment Service and/or Maintenance (must verify sound output)<br>Explanation: N/A |
| ☑ | ☐ | Permit(s) or Authorization from California Department of Fish and Wildlife for surveys in or affecting Marine Protected Area(s) (if applicable)<br>Explanation: Padre received an amended Scientific Collecting Permit last year (SC-12730). |

NOTE: CSLC staff will also require verification that current biological information was obtained and transmitted as outlined in Section 5 of this permit.

# EXHIBIT F

## PRESURVEY NOTIFICATION FORM

Applicant/Permittee's Mailing Address

FUGRO PELAGOS INC.

4820 McGRATH STREET SUITE 100

VENTURA, CALIFORNIA 93003

attached

Date: April 21, 2015

Jurisdiction: Federal ☐ State ☐ Both ☑

If State: Permit #PRC 8391

Region: 2

Area: Pt Buchon

## GEOPHYSICAL SURVEY PERMIT

Check one: ☑ New survey ☐ Time extension of a previous survey

Fugro Pelagos Inc. (Applicant/Permittee) will conduct a geophysical survey offshore California in the survey area outlined on the accompanying navigation chart segment. If you foresee potential interference with commercial fishing or other activities, please contact the person(s) listed below:

FEDERAL WATERS (outside 3 nautical miles)

1) Applicant's representative
2) Federal representative (e.g., Bureau of Ocean Energy Management [BOEM] or National Science Foundation [NSF])

NOTE: Any comments regarding potential conflicts in Federal waters must be received by the Applicant's Representative and lead Federal agency within ten (10) days of the receipt of this notice.

STATE WATERS (Inside 3 nautical miles)

1) Permittee's representative
2) CSLC representative

NOTE: Any comments regarding potential conflicts in State waters should be received as soon as possible by the Permittee's representative, no more than fifteen (15) days after the receipt of this notice.

1. Expected Date of Operation 5/11/2015 - 5/31/2015
2. Hours of Operation Daylight Hours (6:30am - 6:30pm)
3. Vessel Name M/V Surveyor
4. Vessel Official Number 537794
5. Vessel Radio Call Sign WDE6439
6. Vessel Captain's Name Frank Loving
7. Vessel will monitor Radio Channel(s) 16
8. Vessel Navigation System DGPS

9. Equipment to be used Remotely Operated Vehicle (ROV)

   a. Frequency (Hz, kHz) N/A

   b. Source level (dB re 1 μPa at 1 meter (m) [root mean square (rms)]) N/A

   c. Number of beams, across track beamwidth, and along track beamwidth N/A

   d. Pulse rate and length N/A

   e. Rise time N/A

   f. Estimated distances to the 190 dB, 180 dB, and 160 dB re 1 μPa (rms) isopleths N/A

   g. Deployment depth 60ft to 350ft water depths

   h. Tow speed 0.5 to 1 kt

   i. Approximate length of cable tow ROV umbilical

Applicant's Representative:
Eddie Stutts
Fugro Pelagos Inc.
4820 McGrath St. Suite 100
Ventura, CA 93003
(805) 289-3891

California State Lands Representative
Richard B. Greenwood
Statewide Geophysical Coordinator
200 Oceangate, 12th Floor
Long Beach, CA 90802-4331
(562) 590-5201

BOEM Representative
Joan Barminski
Regional Supervisor
Office of Strategic Resources
770 Paseo Camarillo
Camarillo, CA 93010
(805) 389-7585

Other Federal Representative (if not BOEM):

# MARITIME LOGISTICS

P.O. BOX 368 MORRO BAY, CA 93442
805-431-7393

# M/V SURVEYOR

**The M/V SURVEYOR was built by Universal Iron Works, in Houma, Louisiana in late 1972 as an Offshore Supply Vessel. The general overall arrangement is a typical of Gulf offshore crew/supply/utility vessel with the cabin well forward and open aft deck. She has an over all length of 100' 9" and her registered dimensions are Length 92.8 x Breadth 24 x Depth 10.3 with an approximate draft of 7' and a clear deck area of 912 sq. ft. which according to her stability letter will accommodate a 54 long ton deck load. The hull is subdivided by 8 transversely framed water tight bulkheads and one longitudinally ¼" steel bulkhead welded on 3x4 L frames with approximate 24" spacing. Shell plating at sides and decks are 5/16" with a 3/8" bottom. She is subdivided with an anchor locker forward, followed by a storage void, then port and starboard ballast, followed by potable water and fuel oil tankage, then the engine room, aft ballast tanks, and steerage room. Her gulf style house contains berthing and common area accommodations below with additional berthing for 14, galley, navigations room and full width helm forward. Aft of the house opens to clear decks aft and an A Frame mounted at the stern and a crane on the starboard aft rail. She has recently undergone upgrades to her engines, re-issue of her COI for 20 Passengers + 4 crew in accordance with Subchapter T, and carries as stability letter.**

## Principal Characteristics

| | | | |
|---|---|---|---|
| Length (oa): | 100' | Length (wl): | 92 |
| Beam: | 25 | Draft: | 7' |
| Load Deck: | 912 sq. ft. | Deck Cargo: | 54 Long tons (120,960#) |
| Passenger Cap: | 20 max | Berths: | 14 total (5 crew 9 riders) |
| Operating Crew: | 4 to 5 | COI Range: | Oceans |
| Total Ballast: | gal | Fresh Water | 3,400 gal |
| Fuel cap: | 10,300 gal. | Range: | 3,000 Miles |
| Cruising speed: | 8.5 knots | Max speed: | 11 knots |

## Machinery

| | |
|---|---|
| Main engine: | (2) Detroit Diesel, 16V - 71 |
| Main Horsepower | 600 hp. Ea, 1200 hp total @1800 rpm. |
| Generators: | 2ea, tier 2 Cummins Onan 60kw John Deer powered gen's installed 5/2009 |
| Transmissions | Twin Disc MG521 - 3:1 reduction |
| Air | 1 Quincy, two stage compressors, 1 Rotary screw 85 CFM compressor |
| Propellers: | 2 each 45 diameter x 33 pitch |
| Shafts: | stainless steel |
| Hydraulics | 70gpm pumps running off of each generator new installed 5/2009 |

**Deck equipment**

| | |
|---|---|
| Crane | Hydraulic Ramey knuckle crane 2000# all radius SWL |
| A Frame | Five ton max capacity |

Assorted small deck winches and pullers available upon request

**Safety and Navigation**

| | | | | |
|---|---|---|---|---|
| Radar: | #1 JRC | JMA2344 - 72 mile | #2 JRC | JMA2344- 72 mile |
| SSB: | # 1 ICOM | IC – M 700 Pro | #2 ICOM | IC – M 700 Pro |
| GPS: | #1 JRC | JLR-10 compass | #2 Garman | GPS Map 128 |
| AIS | #1 JRC | | | |

| | | |
|---|---|---|
| Fathometer: | JRC | Plot 500F with transducer & GPS |
| Autopilot | Simrad | AP50 installed April 2009 |
| VHF: | #1 JRC JHS-32A GMDSS radio telephone #2&#3 Standard with DSC | |
| Compasses | Sperry / Ritchie | |
| Alarms | General | Engine High-water temp / Bilge / low oil / eng, temp |

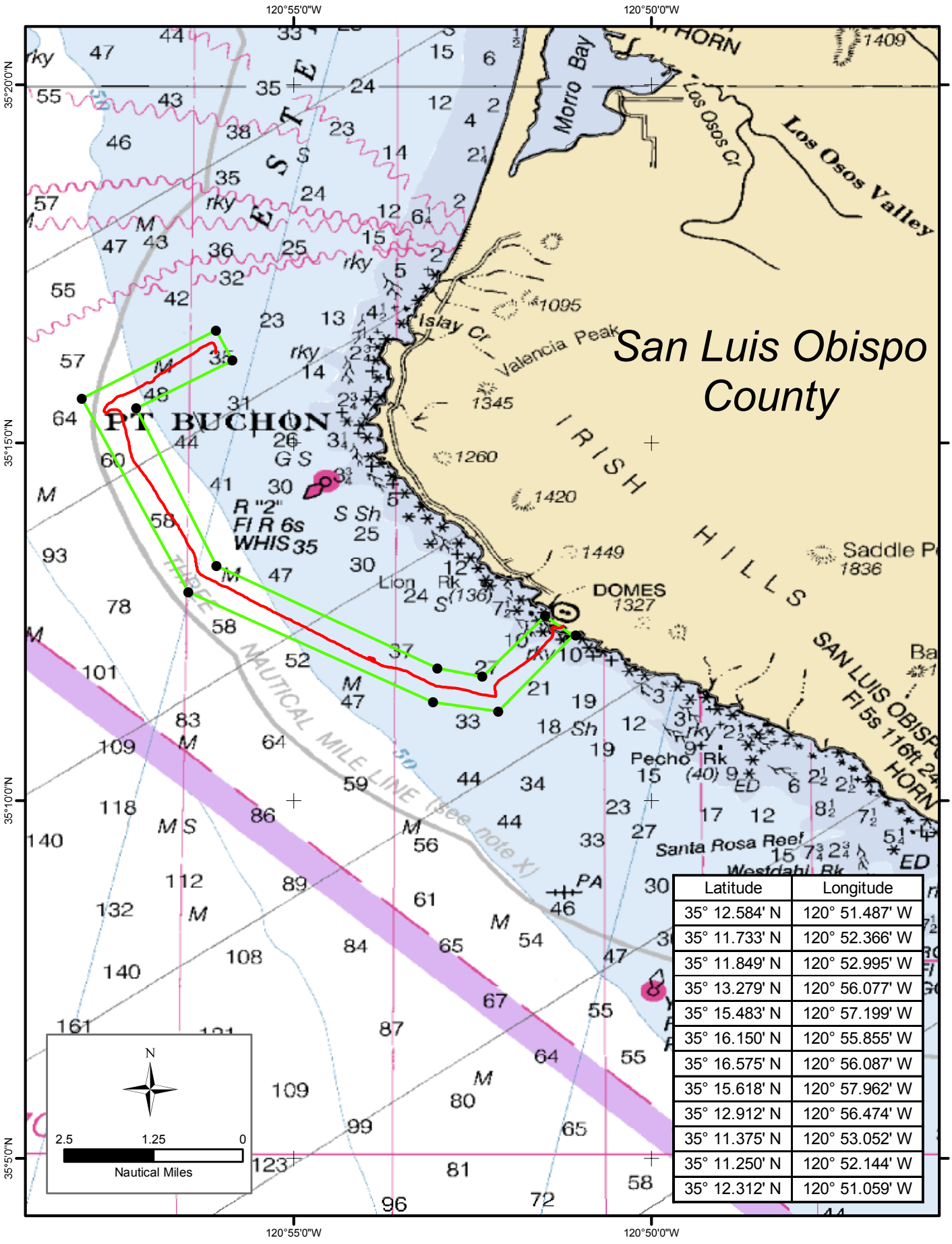
| | |
|---|---|
| Elect, plotting | Nobeltec Admiral with MapTech charts |
| EPIRB | ACR Satellite 406 |
| Life raft | 1 each 25 man SOLAS - A |
| Life float | 1 each 22 man Cal-June |
| Life Rings | 3 USCG approved 2 with lights |
| Life jackets: | 35 Adult 4 Child |
| Life sling: | 1 Life Sling brand |

**Miscellaneous**

| | | | |
|---|---|---|---|
| Sleeping berths: | (14 total ) | Full Galley: | YES |
| TV: | (2) | DVD player: | (1) |
| Shower: | (1) | Toilet: | (1) |
| Hot water | A.O. Smith 50 gallon electric | | |
| Holding tank | CHT water 325 gallons | | |

# NOAA NAUTICAL CHART 18700 WITH PROPOSED SURVEY AREA

Offshore San Luis Obispo County, California




| Latitude | Longitude |
|---|---|
| 35° 12.584' N | 120° 51.487' W |
| 35° 11.733' N | 120° 52.366' W |
| 35° 11.849' N | 120° 52.995' W |
| 35° 13.279' N | 120° 56.077' W |
| 35° 15.483' N | 120° 57.199' W |
| 35° 16.150' N | 120° 55.855' W |
| 35° 16.575' N | 120° 56.087' W |
| 35° 15.618' N | 120° 57.962' W |
| 35° 12.912' N | 120° 56.474' W |
| 35° 11.375' N | 120° 53.052' W |
| 35° 11.250' N | 120° 52.144' W |
| 35° 12.312' N | 120° 51.059' W |

# FUGRO
# 2015 ON-BOARD SPILL CONTAINMENT AND CLEAN-UP PLAN

THIS PLAN IS FOR FUGRO PERSONNEL TO READ *BEFORE* A SPILL OCCURS --AND TO KEEP HANDY FOR REFERENCE DURING AN EMERGENCY.

➧ **THE KEY TO SPILL PROTECTION IS *EARLY* RESPONSE AND ACTION.**

THIS PLAN IS FOR ALL EMPLOYEES ON A VESSEL OR BARGE. IT OUTLINES THE COMPANY PRIORITIES, THE LOCATION OF SPILL RESPONSE EQUIPMENT, INSTRUCTIONS ON HOW TO RESPOND, DIRECTIONS TO EMERGENCY MEDICAL FACILITIES, AND NOTIFICATION NAMES AND PHONE NUMBERS.

## SPILL RESPONSE

### PRIORITIES

In the event of a spill, on-site personnel are in the best position to take prompt action to minimize and control the spill.

**Our company priorities are:**

1. Personnel Safety
2. Prevention of Fire or Explosion
3. Elimination of Spill Source
4. Containment of the Spill
5. Collection and Storage of Contaminated Debris and Materials
6. Notification of Spillage
7. Preparation of Reports

**SAFETY OF PERSONNEL IS ALWAYS OUR FIRST PRIORITY.**

## SPILL RESPONSE MEASURES

**In case of an actual spill, take the following actions IF IT IS SAFE TO DO SO:**

Call 911 for medical or fire emergency assistance if needed

Isolate and administer to injured persons if necessary

TAKE NECESSARY STEPS TO REDUCE THE RISK OF FIRE

- Turn off equipment, valves, or pumps
- Turn off or extinguish any sources of hot surfaces or flame

**STOP SPILL AT SOURCE** IF SAFE AND POSSIBLE

- Stop equipment leaks by crimping hoses, plugging holes, or isolating parts
- Upright turned over oil/grease or paint buckets
- Stop tank leaks by placing in additional containment or plugging hole

CONTAIN ON-DECK SPILL FROM SPREADING OVERBOARD

- Berm around spreading spill with absorbent material(rags, kitty litter, sock boom, etc)
- Apply granular absorbent("kitty litter") in sufficient quantity to soak up entire spill
- Wipe small spills with cotton rags

CONTAIN WATER-BORNE SPILLS TO AS SMALL AN AREA AS POSSIBLE

- Apply absorbent pads to spilled material
- Deploy oil boom/absorbent sock boom

➧ **IF SPILL IS LARGE, CALL THE FUGEO SUPERINTENDENT OR VICE PRESIDENT AS SOON AS POSSIBLE.**

➧ **<u>FOR IMMEDIATE DEPLOYMENT OF LARGE OIL BOOM</u>, CALL ONE OF THE FOLLOWING COMPANIES.**

- Clean Seas, LLC (805) 684-3838
- Marine Spill Response Corporation (MSRC) Tel: (510) 478-0702
- National Response Corporation (NRC) Tel: (562) 506-2060
- Patriot Environmental Services (562) 244-2204
- Foss Maritime or another closer response team and request response to clean up the fuel

CLEAN UP SPILL AND USED SPILL MATERIALS

- Gather soaked rags, absorbents, boom and dirt
- Place in leak proof containers for storage and disposal

## EMPLOYEE TRAINING ON OIL SPILL CONTINGENCY PLAN

Prior to the departure of the vessel for any activities, all Captain and crew members on the vessel will have read the Oil Spill Contingency Plan, understand procedures to be implemented in the event of an oil spill, and know where the oil spill kit is located on the vessel.

## EMERGENCY EQUIPMENT

### LOCATION

As part of each job start-up safety meeting, the spill containment and cleanup material will be discussed and verified.

### EQUIPMENT

The Spill Containment and Cleanup Materials include:

- 1 Box of 20 Gloves: in spill kit box located in front compartment of vessel
- 2 pair Goggles: in spill kit box located in front compartment of vessel
- 1 Box of Rags:in spill kit box located in front compartment of vessel
- 1 Box of 20 Garbage bags: in spill kit box located in front compartment of vessel
- 30 each Absorbent pads: spill kit box located in front compartment of vessel
- 1 Small Oil Boom: located on back deck
- 1 12lb Bag Granular absorbent (“kitty litter”): located in fron compartment of vessel
- 1 Shovel: located on back deck

**FIRE EXTINGUISHERS** ARE MOUNTED ON ALL VESSELS, PICKUP TRUCKS AND THERE IS ONE IN THE OFFICE. THE FIRE EXTINGUISHER WILL BE CHECKED FOR EXPIRATION DATE AND THE LOCATION DISCUSSED AT EACH SAFETY MEETING.

## INVENTORY & RESTOCKING

The on-board spill containment and cleanup materials are inventoried by the Foreman at the start of every job, at least monthly and after a spill response. Depleted items are to be reported to the Superintendent or any member of the office staff. Items are to be ordered immediately and restocked promptly.

## NOTIFICATIONS

In case of a spill, notify a Fugro 24 hour representative (see addendum 1 for names and phone numbers).

GIVE THE FOLLOWING INFORMATION TO THE BEST OF YOUR ABILITY:

- Your name
- Location
- Date of spill
- Time of spill
- Substance spilled
- Quantity spilled
- Potential for continued spill
- Possible health hazard
- Source of spill
- Actions taken
- Threatened resources/utilites

THE ENVIRONMENTAL COORDINATOR WILL:

- Notify the applicable local, state and federal authorities
- Coordinate and disseminate information to the media
- Handle the legal obligations and responsibilities of the company

## Addendum 1

# Emergency Notification

# PHONE LIST

**Fugro , Inc.**
Office 805-650-7000

**California State Lands Commission**
24-Hour Emergency Number 562-590-5201

| | | |
|---|---|---|
| **Fire Emergency** | **911** | **911** |
| **Medical Emergency** | **911** | **911** |

## Addendum 2

## Guide for Fugro Management

1. Call for outside assistance if appropriate for the spill.

2. Call the Company Environmental and Safety Coordinator to coordinate the legal notifications and media inquiries:

3. If there is an **actual** release to the environment, the U.S. EPA Emergency Response Program requires notification to **one** of the following organizations:

| | |
|---|---|
| **NATIONAL RESPONSE CENTER** | 1-800-424-8802 |
| **U.S. COAST GUARD MARINE SAFETY OFFICE** | 1-510-437-3073 |
| | 1-510-437-3074 |

4. Other organizations that may be involved:

| | |
|---|---|
| U.S. EPA Hazardous Waste | 1-415-744-2000 |
| California Office of Emergency Services | 1-800-852-7550 |
| Additional number | 1-916-427-4287 |
| State of California Water Quality | 1-510-286-1255 |
| State of California Fish & Game | 1-707-944-5512 |
| After hours and weekends | 1-916-445-0045 |
| Vessel Traffic | 1-415-556-2760 |
| Ca Oiled Wildlife Care Network | 1-916-445-0045 |

5. The information that will be requested is attached as Addendum # 6.

## Addendum 3

### Fugro ,Owner, and Management Information

**Fugro Environmental and Safety Coordinator**

| | |
|---|---|
| Jeffery Ripper | 858-427-2017 |

**Officers of the Corporation**

| | |
|---|---|
| Robin Villa | 805-815-5812 |
| Eddie Stutts | 805-432-2213 |

## Addendum 4

# OPERATIONAL INFORMATION

NORMAL OPERATIONS

We contract with public and private entities to conduct high resolution low energy geophysical and geotechnical engineering surveys.

To accomplish this work, we purchase equipment, tools, material, and supplies which are gathered at various mobilization sites and loaded onto vessels and barges which are berthed alongside a dock. When needed tugboats move barges to and from the jobsites. At the completion of projects, the reverse process takes place - unloading equipment, materials, tools, and supplies.

POTENTIAL SPILLS DUE TO NORMAL OPERATIONS

**Oil, grease, fuel, or hydraulic fluid leak from machinery or equipment**

Cranes, winches, generators, light plants and boats require fluids to operate.

- Fluids could leak onto the vessel or into the water

**Oil, grease, or fuel spill from storage**

Oil and grease are stored in the vessels and/or barges in 5 gallon or smaller plastic buckets.

- Buckets could be dropped or punctured in transport

Fuel is stored in steel tanks housed on the vessels.

- Tanks could be punctured by sharp objects

**Paint spill**

Paint is generally purchased and utilized as needed. If extra is kept, one gallon pails and spray cans could be stored below deck.

- Pails could be punctured or tipped over during use

## Addendum 5

# PRODUCT USAGE INFORMATION

CHEMICALS AND FUELS (DESCRIPTION & QUANTITIES)

MSDS sheets are available on the vessel, and the Fugro office.

| | |
|---|---|
| Oil | < 4 quarts |
| Gasoline | < 100 gallons |

## Addendum 6

# SPILLS RESULTING FROM VESSEL FUELING

All vessel fueling will be conducted on land at a gas station or at an approved docking facility. No cross vessel fueling will be performed.

# Notice of Survey Operations

**DEPARTMENT OF HOMELAND SECURITY**
**UNITED STATES COAST GUARD**
**COMMANDER, 11TH COAST GUARD DISTRICT**
Building 50-2 Coast Guard Island
Alameda, CA 94501-5100
LNM Point of Contact
BM1 John Hinson: 510-437-2980
D11LNM@uscg.mil

| | |
|---|---|
| **1. Name of Contractor:** | **FUGRO** |
| **2. Type of Operation:** | ***Ocean Bottom Seismometers (OBS) and Cable Recovery. ROV Inspection of OBS and cable locations post-recovery.*** |
| **3. Location / Position Information:** | ***Offshore Pt. Buchon California (See Attached Map)*** |
| **4. Start and End Dates:** | ***Start: May 11, 2015, End: May 31, 2015*** |
| **5. Vessel(s) Involved (include FCC Call Sign):** | ***M/V Surveyor (WDE6439)*** |
| **6. Radio Yes / No, VHF Freq's Monitored:** | ***Yes, VHF 16*** |
| **7. Any other pertinent Info:** | ***The M/V Surveyor will be recovering sensors and cabling off the astern of the vessel and will have restricted maneuverability Operations will be conducted during daylight hours only.*** |
| **8. POC Name & Telephone Number(s):** | ***Cindy Pratt or Eddie Stutts (Fugro)*** ***805-650-7000*** |
| **9. Chart Number:** | ***18700*** |

**CENTRAL CALIFORNIA - OFFSHORE POINT BUCHON CALIFORNIA**

**Guralp Systems will be recovering from the M/V Surveyor four (4) temporary Ocean Bottom Seismometers with connecting cable from the seafloor as shown in the attached map. A ROV will also be deployed to determine locations and existing seafloor conditions at the temporary OBS recovery locations. Operations will last approximately 10 days and be carried out between May 11, 2015 and May 31, 2015 during daylight hours only. The survey area is outlined by the following coordinates:**

| Latitude | Longitude |
|---|---|
| 35° 12.584' N | 120° 51.487' W |
| 35° 11.733' N | 120° 52.366' W |
| 35° 11.849' N | 120° 52.995' W |
| 35° 13.279' N | 120° 56.077' W |
| 35° 15.483' N | 120° 57.199' W |
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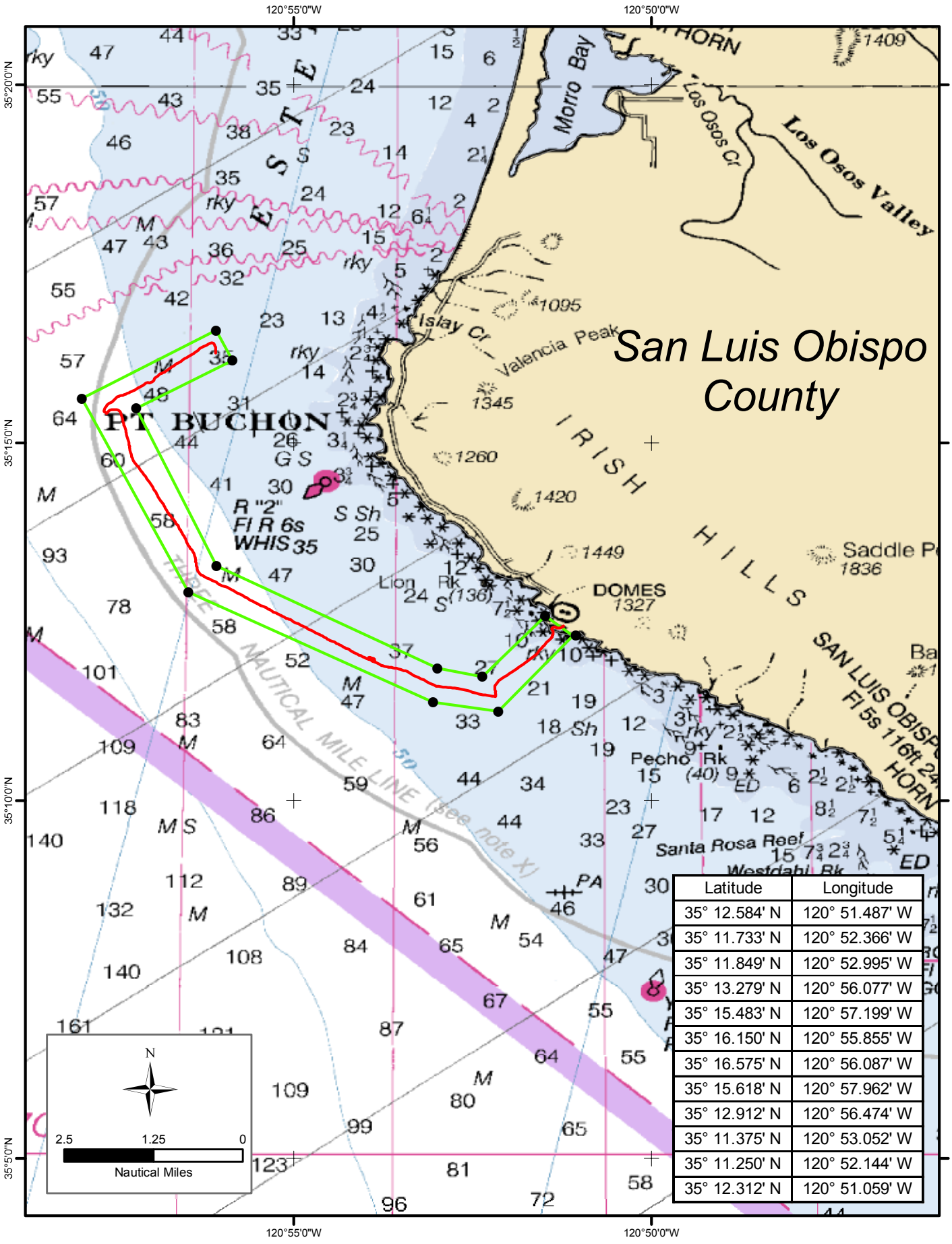
| 35° 15.618' N | 120° 57.962' W |
| 35° 12.912' N | 120° 56.474' W |
| 35° 11.375' N | 120° 53.052' W |
| 35° 11.250' N | 120° 52.144' W |
| 35° 12.312' N | 120° 51.059' W |

**The vessel will have limited maneuverability during operations and mariners are advised to use due caution when transiting in the area. For more details or comments contact Cindy Pratt or Eddie Stutts at 805-650-7000.**

# NOAA NAUTICAL CHART 18700 WITH PROPOSED SURVEY AREA

Offshore San Luis Obispo County, California




| Latitude | Longitude |
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padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

# MARINE WILDLIFE CONTINGENCY PLAN

# PACIFIC GAS AND ELECTRIC (PG&E) POINT BUCHON OCEAN BOTTOM SEISMOMETER PROJECT: SYSTEM RECOVERY AND RE-DEPLOYMENT OF TEMPORARY UNITS

**Prepared for:**
Pacific Gas and Electric

**Prepared By:**

Padre Associates, Inc.
369 Pacific Street
San Luis Obispo, California 93401

April 2015

## TABLE OF CONTENTS



## TABLES



## FIGURES



## APPENDIX

# 1.0 INTRODUCTION

This Marine Wildlife Contingency Plan (MWCP) has been developed in support of the recovery of the four (4) long-term ocean bottom seismometer (OBS) units and associated power and data cable (OBS system), as well as the servicing and re-deployment of four temporary OBS units offshore from the Diablo Canyon Power Plant (DCPP), located along the south-central coast of California (Figure 1).

This MWCP has been prepared in accordance with the Mitigation Monitoring Program (MMP) contained within the Mitigated Negative Declaration (MND) that was adopted on March 29, 2012 by the California State Lands Commission (CSLC) on behalf of the Project. This MWCP is designed to reduce or eliminate adverse impacts to marine wildlife resources within the Project area. This MWCP is specific to the equipment and activities that are proposed for the Project. The proposed monitoring and mitigations have been successfully used in agency-approved MWCPs for similar offshore projects in California marine waters, and have been shown to be effective in reducing or eliminating potential impacts to marine mammals and turtles.

## 1.1 PURPOSE AND OBJECTIVES

In July 2013, PG&E completed the initial installation of the four long-term OBS units connected with a combined power and data cable on the seafloor offshore of the DCPP; located in San Luis Obispo County, California. Final adjustments to the system were conducted between November 6 and November 24, 2013 when the system became fully operational. On February 19, 2014, the system experienced initial failures with the entire system becoming inoperable on April 1, 2014. An assessment conducted by the system's design and installation firm (Guralp System, Ltd) indicated that external damage of the power and data cable from areas of rock and ocean swell were the most likely causes for this system failure. The proposed Project consists of the recovery of the existing OBS system and the servicing and re-deployment of four temporary OBS units onto the seafloor. The temporary OBS units will continue to facilitate the collection of seismic data along the Hosgri and Shoreline faults in the absence of the long-term OBS system that will be removed.

A remotely-operated vehicle (ROV) survey will be completed after the recovery of the OBS system and the re-deployment of the temporary OBS units to record their locations and document seafloor habitats disturbed from the recovery of OBS units and power and data cable. ROV survey activities will be completed by a CSLC geophysical permit holder and all activities will be in-accordance with the CSLC permit requirements. During subsequent servicing of the temporary OBS units, an ROV will only be used if warranted by the surrounding habitat.

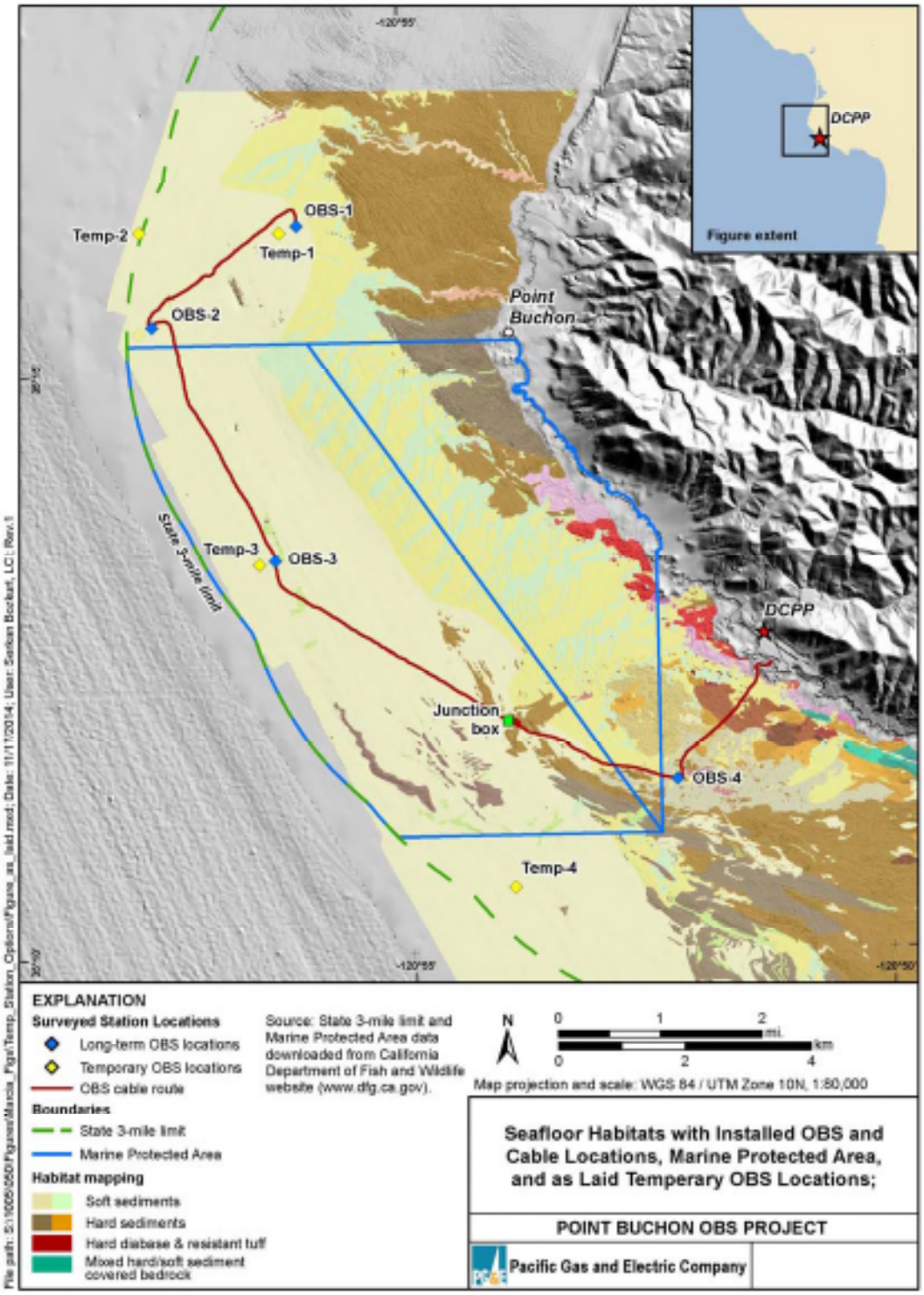


**Figure 1. Existing OBS System and Locations of Temporary Ocean-Bottom Seismometers (OBS) Units**

## 1.2 PROPOSED PROJECT AREA AND SCHEDULE

The proposed Project is located in the waters of the Pacific Ocean offshore of the DCPP along the south-central coast of California. The Project area extends from the DCPP (located onshore), seaward to the State of California jurisdictional limit located 3 nautical miles from the shoreline and between Point Buchon (to the north) to Point San Luis (to the south) (Figure 1).

The Project will be initiated mid-May 2015 and is expected to be completed over a 10 day period with only daytime operations proposed. The vessel, the M.V. *Surveyor*, a 30 meters (m) (100 feet [ft.]) long, steel-hulled vessel owned and operated by Maritime Logistics, will be used for the Project and will return to Morro Bay each evening. In addition, the M.V. Donna Kathleen will be used to provide support for ROV operations during the initial rigging of the OBS units for recovery from the seafloor.

The temporary OBS units will be recovered, serviced to replace batteries and to retrieve data and then re-deployed during the proposed operations.

## 2.0 MARINE WILDLIFE

Multiple species of marine turtles, cetaceans (whales, dolphins, and porpoises), pinnipeds (seals and sea lions), and fissipeds (sea otters) have been recorded along the California coast (Table 1). Most of the recorded species can occur within the project region, although seasonal abundances of these taxa vary; pinnipeds and some dolphins are year-round residents (Table 2). Other species are migratory, such as the gray whale (*Eschrichtius robustus*), or seasonal, such as the blue and humpback whales (*Balaenoptera musculus* and *Megaptera novaeangliae*, respectively) being more abundant during specific months. Within the Project region, resident, seasonal, and migrant taxa could be expected to occur.

**Table 1. Abundance Estimates for Marine Mammals and Reptiles of Central California**

| **Common Name**<br>***Scientific Name*** | **Population Estimate** | **Current Population Trend** |
|---|---|---|
| **REPTILES*** | | |
| **Cryptodira** | | |
| Olive Ridley turtle<br>*Lepidochelys olivacea* | 1.1 million<br>(Eastern Tropical Pacific DPS) | Stable |
| Green turtle<br>*Chelonia mydas* | 20,112<br>(Eastern Pacific DPS) | Stable |
| Loggerhead turtle<br>*Caretta caretta* | 7,138<br>(California) | Decreasing |
| Leatherback turtle<br>*Dermochelys coriacea* | 361<br>(California) | Decreasing |
| **MAMMALS** | | |
| **Mysticeti** | | |
| California gray whale<br>*Eschrichtius robustus* | 18,017<br>(Eastern North Pacific Stock) | Fluctuating annually |
| Fin whale<br>*Balaenoptera physalus* | 2,624<br>(California/Oregon/Washington Stock) | Increasing off California |
| Humpback whale<br>*Megaptera novaeangliae* | 1,878<br>(California/Oregon/Washington Stock) | Increasing |
| Blue whale<br>*Balaenoptera musculus* | 2,046<br>(Eastern North Pacific Stock) | Unable to determine |
| Minke whale<br>*Balaenoptera acutorostrata* | 202<br>(California/Oregon/Washington Stock) | No long-term trends suggested |
| Northern Pacific right whale<br>*Eubalaena japonica* | 31 (based on photo-identification)<br>(Eastern North Pacific Stock) | No long-term trends suggested |
| Sei whale<br>*Balaenoptera borealis* | 83<br>(Eastern North Pacific Stock) | No long-term trends suggested |
| **Odontoceti** | | |
| Short-beaked common dolphin<br>*Delphinus delphis* | 343,990<br>(California/Oregon/Washington Stock) | Unable to determine |
| Long-beaked common dolphin<br>*Delphinus capensis* | 76,224<br>(California Stock) | Unable to determine |
| Dall's porpoise<br>*Phocoenoides dalli* | 32,106<br>(California/Oregon/Washington Stock) | Unable to determine |
| Harbor porpoise<br>*Phocoena phocoena* | 1,478<br>(Morro Bay Stock) | Increasing |
| Pacific white-sided dolphin<br>*Lagenorhynchus obliquidens* | 21,406<br>(California/Oregon/Washington Northern and Southern Stock) | No long-term trends suggested |
| Risso's dolphin<br>*Grampus griseus* | 4,913<br>(California/Oregon/Washington Stock) | No long-term trends suggested |
| Short-finned pilot whale<br>*Globicephala macrorhynchus* | 465<br>(California/Oregon/Washington Stock) | No long-term trends suggested |

| **Common Name**<br>***Scientific Name*** | **Population Estimate** | **Current Population Trend** |
|---|---|---|
| Striped dolphin<br>*Stenella coeruleoalba* | 8,231<br>(California, Oregon, Washington) | No long-term trends suggested |
| Baird's beaked whale<br>*Berardius bairdii* | 615<br>(California, Oregon, Washington) | No long-term trends suggested |
| Cuvier's beaked whale<br>*Ziphius cavirostris* | 1,298<br>(California, Oregon, Washington Stock) | No long-term trends suggested |
| Mesoplodont beaked whales | 576<br>(California, Oregon, Washington) | No long-term trends suggested |
| Bottlenose dolphin<br>*Tursiops truncatus* | 684<br>(California/Oregon/Washington Offshore Stock) | No long-term trends suggested |
| | 290<br>(California Coastal Stock) | No long-term trends suggested |
| Northern right whale dolphin<br>*Lissodelphis borealis* | 6,019<br>(California/Oregon/Washington Stock) | No long-term trends suggested |
| Sperm whale<br>*Physeter macrocephalus* | 751<br>(California/Oregon/Washington Stock) | No long-term trends suggested |
| Dwarf sperm whale<br>*Kogia sima* | Unknown<br>(California, Oregon, Washington) | No long-term trends suggested |
| Pygmy sperm whale<br>*Kogia breviceps* | 271<br>(California/Oregon/Washington Stock) | No long-term trends suggested |
| Killer whale<br>*Orcinus orca* | 162<br>(Eastern North Pacific Offshore Stock)<br>354<br>(West Coast Transients) | No long-term trends suggested |
| **Pinnipedia** | | |
| California sea lion<br>*Zalophus californianus* | 141,842<br>(U.S. Stock) | Unable to determine; increasing in most recent three year period |
| Northern fur seal<br>*Callorhinus ursinus* | 5,395<br>(San Miguel Island Stock) | Increasing |
| Guadalupe fur seal<br>*Arctocephalus townsendi* | 3,028<br>(Mexico Stock)<br>Undetermined in California | Increasing |
| Northern (Steller) sea lion<br>*Eumetopias jubatus* | 2,479<br>(California Stock) | Decreasing |
| Northern elephant seal<br>*Mirounga angustirostris* | 74,913<br>(California Breeding Stock) | Increasing |
| Pacific harbor seal<br>*Phoca vitulina richardsi* | 26,667<br>(California Stock) | Stable |
| **Fissipedia** | | |
| Southern sea otter<br>*Enhydra lutris nereis* | 2,944** | Unable to determine |

*Source: Allen, 2011, NMFS, 2014, NMFS and USFWS, 2014, and NMFS and USFWS, 2015*

* *Estimates are based on known data of the population of nesting females for eastern Pacific Distinct Population Segments.*

** *Estimate provided by USGS, 2014*

## Table 2. Marine Wildlife Species within Southern California (California/Mexico Border to Point Conception) and Periods of Occurrence

| Family / Common Name | Month of Occurrence(1) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | J | F | M | A | M | J | J | A | S | O | N | D |
| **REPTILES** | | | | | | | | | | | | |
| **Cryptodira** | | | | | | | | | | | | |
| Olive Ridley turtle (T)[2] | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Green turtle (T)[2] | ■ | ■ | ■ | ■ | ■ | ■ | ▨ | ▨ | ▨ | ■ | ■ | ■ |
| Leatherback turtle (E)[2] | ■ | ■ | ■ | ■ | ■ | ■ | ▨ | ▨ | ▨ | ■ | ■ | ■ |
| Loggerhead turtle (T)[2] | ■ | ■ | ■ | ■ | ■ | ■ | ▨ | ▨ | ▨ | ■ | ■ | ■ |
| **MAMMALS** | | | | | | | | | | | | |
| **Mysticeti** | | | | | | | | | | | | |
| California gray whale | ▨ | ▨ | ▨ | ▨ | ▨ | □ | □ | □ | □ | □ | ▨ | ▨ |
| Blue whale (E) | □ | □ | □ | □ | □ | ■ | ■ | ■ | ■ | ■ | ■ | □ |
| Fin whale (E) | □ | □ | □ | □ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ |
| Humpback whale (E) | □ | □ | □ | □ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ |
| Minke whale | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Sei whale (E) | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ |
| Northern right whale (E) | ■ | ■ | □ | □ | □ | □ | □ | □ | □ | ■ | ■ | ■ |
| **Odontoceti** | | | | | | | | | | | | |
| Short-beaked common dolphin | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ■ | ■ | ■ | ■ | ■ | ▨ |
| Dall's porpoise | ▨ | ▨ | ▨ | ▨ | ▨ | ■ | ■ | ■ | ■ | ■ | ■ | ▨ |
| Harbor porpoise | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ▨ |
| Long-beaked common dolphin | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ■ | ■ | ■ | ■ | ■ | ▨ |
| Pacific white-sided dolphin | ■ | ■ | ■ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ■ | ■ | ■ |
| Risso's dolphin | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Short-finned pilot whale | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Striped dolphin | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Baird's beaked whale | ■ | ■ | ■ | ■ | ■ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ■ |
| Cuvier's beaked whale | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Mesoplodont beaked whales | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Bottlenose dolphin | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Northern right whale dolphin | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | □ | □ | □ | ■ |
| Sperm Whale | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Dwarf Sperm Whale | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Pygmy sperm whale | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Killer Whale | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| **Pinnipedia** | | | | | | | | | | | | |
| Northern fur seal[3] | □ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | ▨ | □ | □ | □ |
| Guadalupe fur seal | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| California sea lion | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Northern elephant seal[4] | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Pacific harbor seal | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Steller sea lion | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| **Fissipedia** | | | | | | | | | | | | |
| Southern sea otter (T)[5] | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

■ Rare with uniform distribution

□ Not expected to occur due to seasonal distribution

▨ More likely to occur due to seasonal distribution

■ Present Year Round

(E) Federally listed endangered species.
(R) Rare species.
(T) Federally listed threatened species.

(1) Where seasonal differences occur, individuals may also be found in the "off" season. Also, depending on the species, the numbers of abundant animals present in their "off" season may be greater than the numbers of less common animals in their "on" season.
(2) Rarely encountered, but may be present year-round. Greatest abundance during July through September.
(3) Only a small percent occur over continental shelf (except near San Miguel rookery, May-November).
(4) Common near land during winter breeding season and spring molting season.
(5) Only nearshore (diving limit 100 feet).

Sources: Bonnell and Dailey,1993; NMFS, 2014 (a,b); NCCOS, 2007; and Allen, 2011

## 2.1 PINNIPED HAUL-OUTS AND ROOKERIES

Along the coastline between Point Buchon and Port San Luis, harbor seals haul-out on the numerous rocky and sandy beaches; harbor seals, and California and Steller sea lions also haul-out and have established rookeries at Pecho and Lion Rocks (Figure 2). As shown in Figure 2, the closest haul-out/rookery from the Project site is located along the shoreline south of the DCPP intake embayment area.

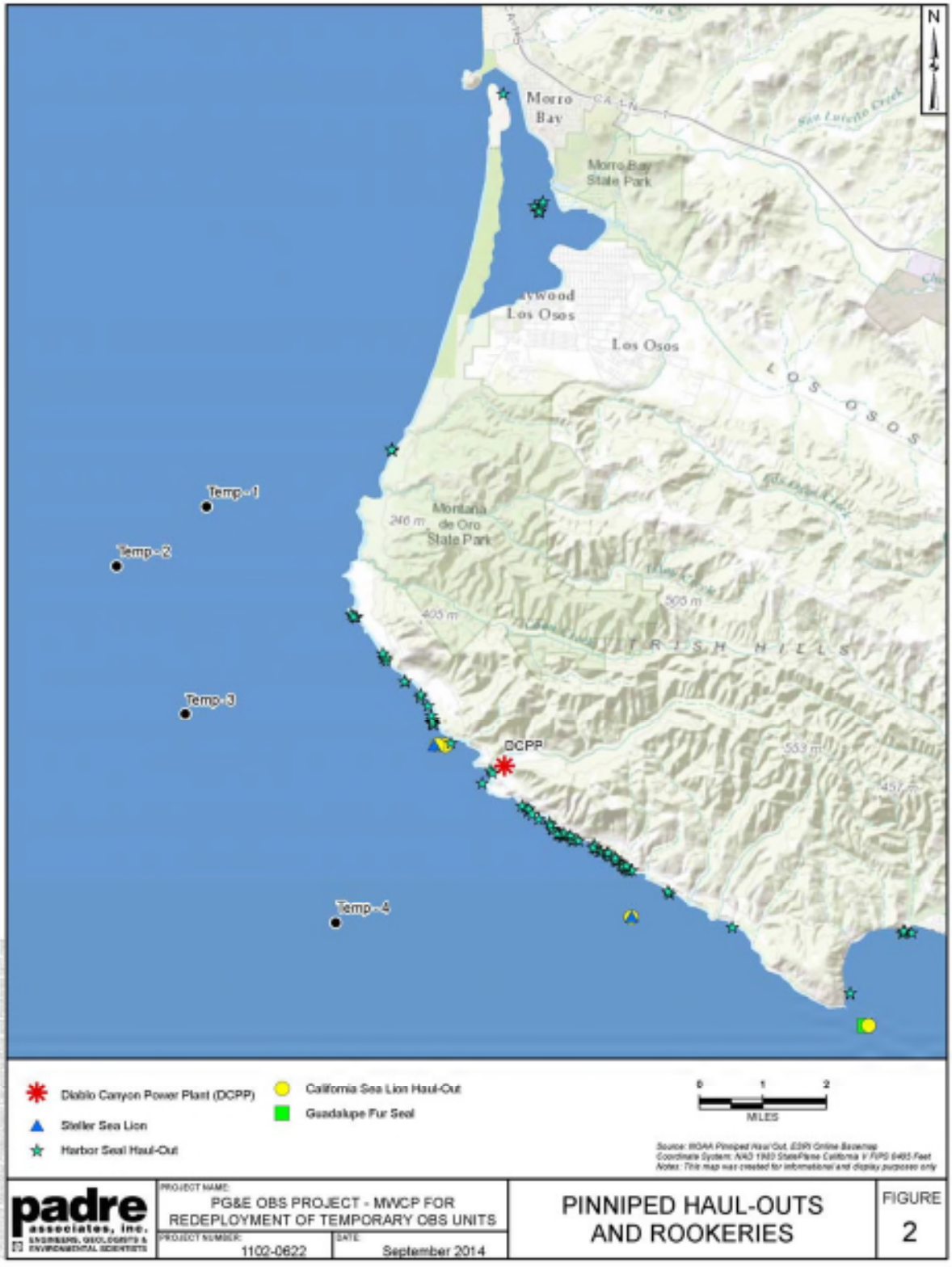


**Figure 2. Pinniped Haul-outs and Rookeries**

## 3.0 MARINE PROTECTED AREAS

One of the four proposed temporary OBS units, Temp-3, will be re-deployed within the Point Buchon Marine Protected Area (MPA) (Figure 3). Two separate designations, a State Marine Reserve (SMR) and a State Marine Conservation Area (SMCA), are within the Point Buchon MPA.

OBS system recovery operations are expected to come in close proximity to rocky substrate at several locations within the MPA. After recovery of the OBS system, an ROV will be used on record any disturbance to the sea floor and ensure all Project-related equipment was recovered from the cable corridor. Impacts to the MPA are expected to be significantly less than previously identified in the Project's MND. In addition, an amendment to the existing Scientific Collecting Permit (SCP) was obtained from California Department of Fish and Wildlife (CDFW) prior to the Project. Temp-3 will be re-deployed in the SMCA.

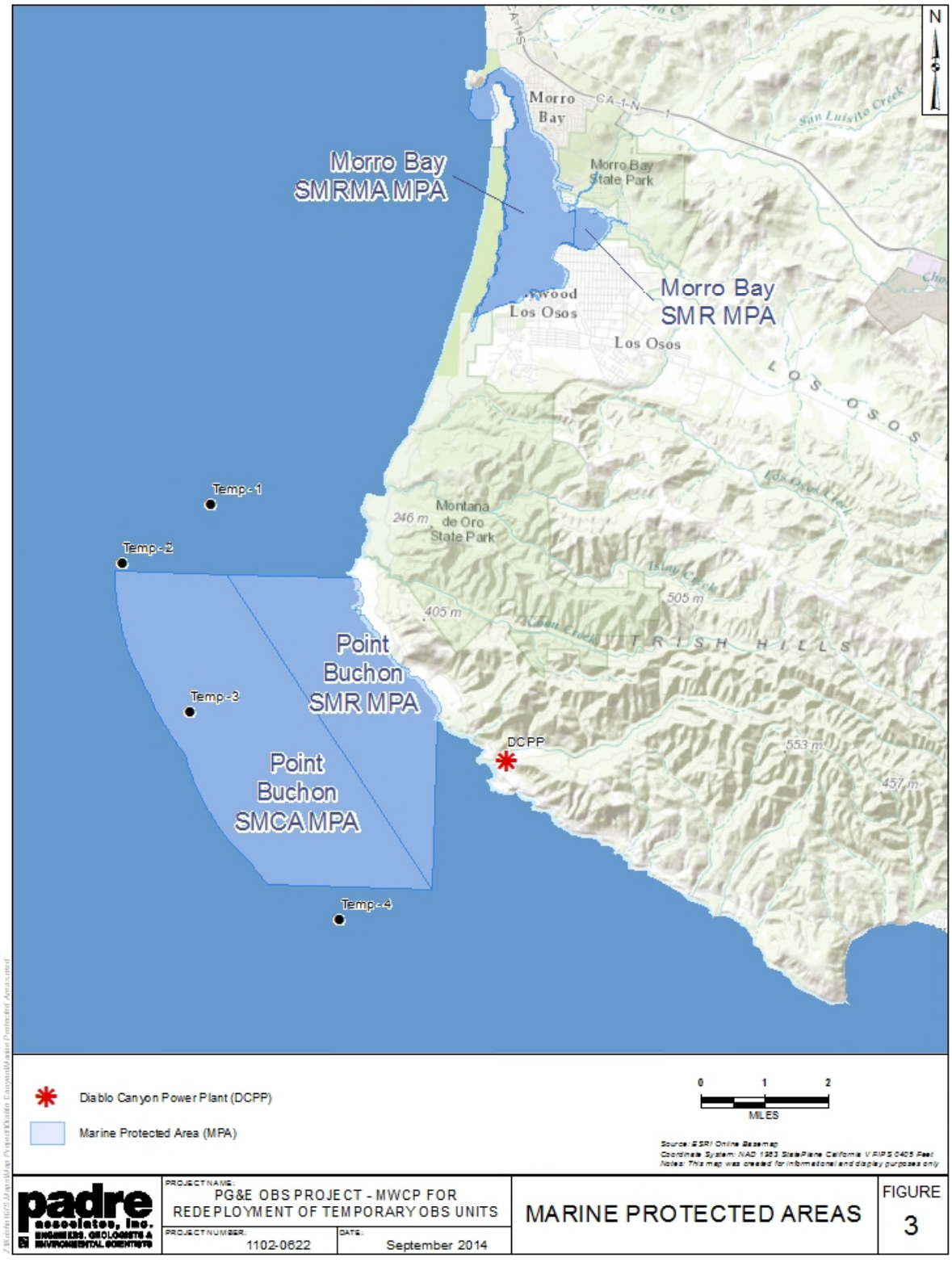


**FIgure 3. Marine Protected Areas**

# 4.0 ONBOARD MONITORING AND OTHER MITIGATIONS

## 4.1 VESSEL TRANSIT

The Project vessels, the M/V *Surveyor and M/V Donna Kathleen,* will travel the approximate 15 to 20 km (8 to 11 nautical miles [nm]) between the Port of Morro Bay and the Project area in a direct route (generally south from the Port of Morro Bay to the site). During vessel transit to and from the Project area, there is a potential for encountering marine wildlife; therefore onboard monitoring will occur. A qualified marine wildlife monitor (approved by NOAA Fisheries and/or experienced in marine wildlife observations – refer to Appendix A for monitor resumes) will be onboard the vessel throughout the period of the vessel transit and temporary OBS deployment.

During transit periods, a marine wildlife monitor will be positioned on the vessel so that the monitor will have a clear view of the area of ocean that is in the direction of the course of travel. That monitor will observe marine mammals and turtles (marine wildlife) and will follow procedures to avoid potential collisions with marine wildlife. To minimize the chance of collision with or disturbance of marine wildlife, the vessel will maintain a minimum distance of 100 m (330 ft.) from marine wildlife as recommended by NOAA Fisheries. If the marine wildlife monitor should observe marine wildlife within the path of the transiting vessel, the monitor will immediately report that observation to the vessel operator who will, unless those actions will jeopardize the safety of the vessel or crew, slow the vessel and/or change course in order to avoid contact.

When whales are in the Project area and/or are observed proximal to the vessel during transit periods the vessel operator will observe the following guidelines:

- Will not approach a whale within 100 m (330 ft) from sighted whales;
- Do not cross directly in front of or across the path of sighted whales;
- Transit parallel to whales and maintain a constant speed that is not faster than the whale's speed;
- Do not position the vessel in such a manner to separate a female whale from her calf;
- Do not use the vessel to herd or drive whales; and,
- If a whale engages in evasive or defensive action, slow the vessel and move away from the animal until the animal calms or moves out of the area.

## 4.2 FISHING GEAR CLEARANCE

In addition to submitting the required Notice to Mariners that will alert commercial fishers of pending on-water activities; prior to the start of Project activities, the onboard marine wildlife monitor will survey the Project area to note and record the presence of deployed fishing gear. The type and location of fishing gear (buoys) will be noted, and the CDFW San Luis Obispo office will be contacted if the fishing gear is in the Project area. No project activities will be completed within 30 m (100 ft) of the observed fishing gear. The Project crew will not remove or relocate any fishing gear; removal or relocation will only be accomplished by the owner or by an authorized CDFW agent (Table 3).

**Table 3. Fishing Gear Contact Information**

| California Department of Fish & Wildlife, San Luis Obispo |
|---|
| Sandy Owen<br>San Luis Obispo Field Office<br>3196 South Higuera Street, Suite A<br>San Luis Obispo, California 93401<br>(805) 772-1261<br>Sandy.Owen@wildlife.ca.gov |

## 4.3 ROV OPERATIONS

During ROV operations, the vessel will be centered over the previously existing cable route and OBS locations. The ROV will be deployed and will survey the length of the corridor over a period of three to four days following removal of the OBS units and data/power cable. ROV operations will utilize passive survey equipment and no acoustic equipment will be deployed. If marine wildlife is observed within the vicinity of the vessel, the ROV operator will be advised and precautions to avoid collision or entanglement of the animal with the ROV umbilical will be instituted. Those precautions will include:

- Minimizing the amount of umbilical deployed (without jeopardizing the ROV survey equipment or vessel);
- Continue observations of the animal(s) until it/they are clear of the operations;
- Slow the vessel to minimum speed needed to maintain heading; and,
- Avoid crossing the anticipated path of the marine animal's direction of movement.

With the institution of these procedures, no impacts associated with vessel transit or ROV operations to marine wildlife are expected.

## 4.4 PRE-PROJECT NOTIFICATIONS

A Notice to Mariners will be submitted to the United States Coast Guard and all applicable agencies approximately 21 days prior to the start of the Project. The Notice to Mariners will provide information regarding proposed activities and location of Project activities. The notice will be delivered for posting to the local harbormaster's office and dive shops.

Prior to the initiation of the Project, the marine wildlife monitor will contact the NOAA Fisheries Long Beach staff and available private whale-watching operations to acquire information on the composition and relative abundance of marine wildlife within the Project area and region. That information will allow the marine wildlife monitor to be better prepared for the offshore monitoring and to have the latest information on marine wildlife presence within the Project area. That information will be conveyed to the Project and vessel crews prior to departure.

## 4.5 OPERATION-RELATED ACTIONS

In addition to the notifications discussed above, the following operation-related actions will be implemented in accordance with CSLC permit requirements:

1. Onboard monitoring will be completed by a qualified marine wildlife monitor who will be located at a high vantage point onboard the vessel and will use binoculars to observe marine wildlife throughout the period of the vessel operations.
2. All operations will be completed during daylight to maximize marine wildlife observations.
3. The onboard marine wildlife monitor shall observe and record the presence of marine wildlife (mammals and reptiles) during the deployment of the temporary OBS units and shall have the authority to advise changes in operations if the actions are resulting in potentially significant impacts to the wildlife, if those actions will not jeopardize vessel or crew safety.
4. The onboard marine wildlife monitor will record all observations of marine mammals and reptiles including, where possible, the species, number of individuals, behavior, distance from the vessel, and direction of movement. Actions taken when an animal is observed within the Project area and the results of those actions will also be recorded.
5. The onboard marine wildlife monitor will have a current Scientific Collecting Permit onboard that is issued to the monitor for this Project.

# 5.0 RECORDING AND REPORTING PROCEDURES

## 5.1 OBSERVATION RECORDING

The onboard monitor will record observations on pre-printed forms and will photo-document observations whenever possible. The completed forms will be used as the primary data sources for the post-project report (see Section 5.3 below) which will be provided to the CSLC and/or other agencies if requested.

## 5.2 COLLISION RESPONSE

If a collision with marine wildlife occurs, the vessel operator will document the conditions under which the accident occurred, including the following:

- Location (latitude and longitude) of the vessel when the collision occurred;
- Date and time of collision;
- Speed and heading of the vessel at the time of collision;
- Observation conditions (e.g., wind speed and direction, swell height, visibility in miles or kilometers, and presence of rain or fog) at the time of collision;
- Species of marine wildlife contacted (if known);
- Whether an observer was observing for marine wildlife at the time of collision; and,
- Name of vessel, vessel owner/operator (the company), and captain or officer in charge of the vessel at time of collision.

If a collision occurs, the vessel should stop, if safe to do so. However, the vessel is not obligated to stand by and may proceed after confirming that it will not further damage the marine wildlife by doing so. The vessel operator will then communicate by radio or telephone all details to the vessel's base of operations.

The Marine Mammal Protection Act (MMPA) requires that collisions with or other project-related impacts to marine wildlife will be reported promptly to the National Marine Fisheries Service (NMFS) Stranding Coordinator. From the report, the NMFS Stranding Coordinator will coordinate subsequent action, including enlisting the aid of marine mammal rescue organizations, if appropriate.

From the vessel's base of operations, a telephone call will be placed to the NMFS West Coast (California) Stranding Coordinator in Long Beach (Table 4), to obtain instructions. Alternatively, the vessel captain may contact the NMFS Stranding Coordinator directly using the marine operator to place the call or directly from an onboard telephone, if available to.

It is unlikely that the vessel will be asked to stand by until NOAA Fisheries or CDFW personnel arrive; however, this will be determined by the NOAA Fisheries Stranding Coordinator. According to the MMPA, the vessel operator is not allowed to aid injured marine wildlife or recover the carcass unless requested to do so by the Stranding Coordinator.

Although NOAA Fisheries has primary responsibility for marine wildlife in both state and federal waters, the CDFW will also be advised if an incident has occurred in state waters affecting a protected species. Reports will be communicated to the federal and state agencies listed below (Table 4).

**Table 4. Collision Contact Information**

| Federal | State | State |
|---|---|---|
| Justin Viezbicke<br>Stranding Coordinator<br>NOAA Fisheries Service<br>Long Beach, California<br>(562) 980-3230 | Enforcement Dispatch Desk<br>California Department of Fish and Wildlife<br>Long Beach, California<br>(562) 590-5132 | California State Lands Commission<br>Division of Environmental Planning and Management<br>Sacramento, California<br>(916) 574-0748 |

## 5.3 MONITORING REPORT

A technical report will be prepared documenting Project activities, observations of marine wildlife, a summary of encounters with any marine wildlife and subsequent actions taken during the survey. The report will be submitted to PG&E within two weeks of completion of field data collection. PG&E will then submit the monitoring report to the appropriate agencies.

## 6.0 REFERENCES

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# APPENDIX A:
# MARINE WILDLIFE MONITOR RESUMES

# Jennifer Klaib

***Marine Biologist/Biologist***

**EDUCATION:**

**B.S. Aquatic Biology (Marine Emphasis)**
University of California – Santa Barbara, 2006.

**QUALIFICATIONS:**

- Biological Surveying and Monitoring
- Biological Resource Surveys/Reports
- Contingency Plans
- Restoration and Mitigation Plans
- Permit Compliance Monitoring
- Permit Applications
- Agency Communications
- Off-Shore Marine Mammal Monitoring
- Wildlife Rescue and Relocation

Ms. Klaib joined Padre Associates, Inc. in 2006. As a marine biologist with Padre she has experience in environmental assessments of coastal and offshore development projects, monitoring of construction impacts on biological resources, and in the permitting of coastal projects. Ms. Klaib is responsible for biological surveys, permit compliance monitoring, contingency plans, permit applications, environmental sensitivity trainings, sensitive species surveys, water quality sampling, and wildlife rescue and relocation.

Ms. Klaib has also worked for the Marine Science Institute at the University of California – Santa Barbara where she participated in subtidal and rocky intertidal field research associated with long-term monitoring of biological resources on the Channel Islands and in San Diego County. She also has 6 years of supervisonal experience in marine mammal rescue and rehabilitation with the Santa Barbara Marine Mammal Center.

**MARINE PROJECT EXPERIENCE SUMMARY:**

Ms. Klaib has over 2,000 hours of offshore monitoring experience and is a NOAA Fisheries-qualified marine mammal monitor. Ms. Klaib was responsible for monitoring the effects of construction on marine mammals and turtles during geophysical surveys throughout the California coast, for the PG&E deep seismic surveys offshore Point Buchon, during the installation of pile-supported piers at South Bay Boat Yard in San Diego Bay, and during the replacement of a power cable offshore of Carpinteria. Ms. Klaib has also participated in aerial surveys off the central coast of California. She has logged 40 hours of aerial observations of marine mammals and reptiles.

Ms. Klaib has participated in construction monitoring activities for the Calleguas Municipal Water District Hueneme Outfall Replacement Project, AT&T AAG Fiber Optic Cable Project, the US Coast Guard Floating Dock Repair Project (San Diego Sector), Fifth Avenue Landing/Water Transportation Center Marina Enhancement Project and during the installation of pile-supported piers at South Bay Boat Yard in San Diego Bay. She was responsible for monitoring the effects of construction on

marine mammals, turtles and marine avifauna. Ms. Klaib also participated in turbidity monitoring activities for the later projects and for the PG&E pipeline remediation project in the Sacramento and San Joaquin rivers (delta region), ensuring permit compliance. She has also participated in post-construction monitoring of the recovery of surf grass (*Phyllospadix spp*) at the decommissioned Cojo Marine Terminal near Point Conception.

Prior to joining Padre Associates, Ms. Klaib participated in field studies that included monitoring of the effects of demolition of offshore oil and gas facilities in Santa Barbara Channel on fish, marine mammals and birds. The involvement included the collection and identification of fish species as well as recording aerial and shipboard observations of marine mammals.

**ENVIRONMENTAL DOCUMENTATION:**

Ms. Klaib's NEPA experience includes preparation of technical sections for environmental assessment documents for a proposed liquefied natural gas facility off the coast of California; for a proposed marina expansion; and for a proposed hydrogen gas pipeline between the cities of Martinez and Benicia in the Carquinez Straits area of San Francisco Bay. She has also participated in the preparation of permit applications and application support packages for shipyard and marina expansion projects in San Diego Bay.

Ms. Klaib's experience in CEQA projects includes preparation of environmental documents consisting of mitigated negative declarations (MND), initial studies, environmental assessments, monitoring reports, technical reports and environmental impact reports (EIR).

Ms. Klaib has experience in the development of monitoring plans, including the observation and reporting protocols that focus on the documentation of marine operations, oil spill prevention, and marine mammal and bird mitigation compliance.

**BIOLOGICAL OPINIONS / PERMITS:**

**CDFG Scientific Collecting Permit (No. SC-11935)** authorizing *capture and release* of marine fishes, and marine/tidal invertabrates. This permit also authorizes the salvage of marine aquatic plants.

**CDFG Scientific Collecting Permit (No. SC-12730)** authorizing *sacrifice* of marine aquatic plants, and marine/tidal invertabrates.

**CERTIFICATIONS:**

Certified SCUBA Diver (SSI, 2002)
Certified AAUS Research Diver (2003)
Certified *Caulerpa* Survey Specialist (2008)
40-Hr. Hazardous Waste Certification (HAZWOPER)
1st Aid, CPR, and Oxygen Administration Certified (Bi-annual Refresher)
Offshore Survival/Helicopter Underwater Egress *Training (*H.U.E.T) (2008)
NOAA Basic Aviation and Aviation Health Safety Course (2012)
Confined Space Attendant and Entrant
San Ardo/Coalinga – EHS Site Specific Orientation.
Smith System Defensive Driving Course.

# Michaela Hoffman

***Staff Biologist***

**EDUCATION:**

**B.S. Biology, Concentration: Marine Science and Fisheries**
California Polytechnic State University, San Luis Obispo, 2009

**QUALIFICATIONS:**

- Biological Surveying and Monitoring
- Biological Resource Surveys/Reports
- Marine Wildlife Contingency Plans
- Essential Fish Habitat Assessments
- Offshore Marine Wildlife Observer
- Wildlife Rescue and Relocation

Ms. Hoffman is a staff biologist and is responsible for mitigation monitoring of protected species offshore, preparing permit applications, wildlife contingency plans and resource assessments. Primarily, she is responsible for monitoring various geophysical surveys offshore San Luis Obispo and Santa Barbara counties. Ms. Hoffman joined Padre Associates, Inc. in 2011. Prior to joining Padre, her experience consisted of both research-based and hands-on experience with marine wildlife.

**OFFSHORE EXPERIENCE:**

Ms. Hoffman's offshore experience includes over 150 hours while onboard the Navy Marine Mammal Program (NMMP) training vessels, as well as experience on a research boat for California Polytechnic State University. While with the NMMP in 2007, she was responsible for record keeping, care of working animals, and general crew duties. In 2008-2009, she participated in water quality research while studying at Cal Poly San Luis Obispo and has experience with small vessel operations within Morro Bay, California. Her responsibilities included navigating shallow water channels using GPS, monitoring for wildlife, and maintenance of instruments.

Ms. Hoffman has more than 1,000 hours of experience monitoring marine wildlife and is a National Oceanic and Atmospheric Administration (NOAA) qualified marine mammal monitor. She was responsible for monitoring marine mammals, reptiles, and avifauna during pipe replacement projects in the Dos Cuadras oil field in the Santa Barbara Channel and in the Beta Unit offshore Long Beach, California. Ms. Hoffman was also responsible for monitoring wildlife during the PG&E 3D geophysical surveys offshore San Luis Obispo county in 2011 and 2012, and the cable and seismometer deployments in 2013.

**ENVIRONMENTAL DOCUMENATION:**

Ms. Hoffman has experience preparing marine wildlife contingency plans and incidental harassment assessments for high-energy offshore geophysical surveys, oil and gas pipe replacements, and marine terminal decommissioning projects. Ms. Hoffman has also prepared vessel oil spill contingency plans and essential fish habitat assessments for various marine projects. She has also assisted in the preparation of biological resource sections for CEQA documents such as environmental impact reports (EIRs), and mitigated negative declarations (MNDs).

**MARINE WILDLIFE HANDLING:**

Ms. Hoffman worked with the NMMP in San Diego, California where she had responsibilities in both animal husbandry and acoustical research with California sea lions and Atlantic bottlenose dolphins. Ms. Hoffman also has experience in marine mammal rehabilitation at the Marine Mammal Center in Morro Bay, California and Wolf Hollow Rehabilitation Center on San Juan Island, Washington. Her responsibilities included transporting sick and injured animals, and providing medical aid for federally protected species such as California sea lions, Pacific harbor seals, northern elephant seals, fur seals, and southern sea otters.

**CERTIFICATIONS:**

Certified SCUBA Diver, PADI 2008

40-Hr. Hazardous Waste Certification (HAZWOPER), 2011

CPR/AED and First Aid Certified, 2011

STCW Certified Personal Survival Techniques, Cal Maritime Academy, 2011

**BIOLOGICAL WORKSHOPS:**

**Taxonomy and Ecology of Branchiopods of California and Oregon**, *December 2012.* Presented by Christopher Rogers

**Fairy Shrimp of California Identification Course,** *March 2013.* Presented by Mary S. Belk.

## Pratt, Cynthia FPI

**From:** Pratt, Cynthia FPI
**Sent:** Tuesday, April 21, 2015 4:09 PM
**To:** 'D11LNM@uscg.mil'
**Cc:** Stutts, Eddie [FWI] (EStutts@fugro.com); 'Simon Poulter'
**Subject:** Local Notice to Mariners
**Attachments:** LNM OBS Recovery.pdf

Good Afternoon,

Attached is a local notice to mariners for an upcoming project.

Please contact me if you have any questions or further requirements.

Kind regards,
Fugro Pelagos, Inc.

**Cindy Pratt**
**Survey Operations Manager – Ventura**

T +1 805 289 3807 I C +1 805 279 1138
cpratt@fugro.com I www.fugro.com
4820 McGrath Street, Suite 100, Ventura, CA 93003-7778, USA

## Pratt, Cynthia FPI

**From:** Pratt, Cynthia FPI
**Sent:** Tuesday, April 21, 2015 4:47 PM
**To:** 'stevem@portsanluis.com'
**Subject:** Pre-survey notification
**Attachments:** Hrbr_DiveShop_Notifications.pdf

Good Afternoon, Steve –

Per our geophysical notification requirements by California State Lands Commission (CSLC), I am submitting to you the attached notice for posting.

Please contact me if you have any questions or require further information.

Kind regards,
Fugro Pelagos, Inc.

**Cindy Pratt**
**Survey Operations Manager – Ventura**

T +1 805 289 3807 I C +1 805 279 1138
cpratt@fugro.com I www.fugro.com
4820 McGrath Street, Suite 100, Ventura, CA 93003-7778, USA

## Pratt, Cynthia FPI

**From:** Pratt, Cynthia FPI
**Sent:** Tuesday, April 21, 2015 4:47 PM
**To:** 'EEndersby@morro-bay.ca.us'
**Subject:** Pre-survey notification
**Attachments:** Hrbr_DiveShop_Notifications.pdf

Good Afternoon, Mr. Endersby,

Per our geophysical notification requirements by California State Lands Commission (CSLC), I am submitting to you the attached notice for posting.

Please contact me if you have any questions or require further information.

Kind regards,
Fugro Pelagos, Inc.

**Cindy Pratt**
**Survey Operations Manager – Ventura**

T +1 805 289 3807 I C +1 805 279 1138
cpratt@fugro.com I www.fugro.com
4820 McGrath Street, Suite 100, Ventura, CA 93003-7778, USA

## Pratt, Cynthia FPI

**From:** Villegas, Bradi FPI
**Sent:** Wednesday, April 22, 2015 10:02 AM
**To:** 'shawnsteam@gmail.com'
**Cc:** Pratt, Cynthia FPI
**Subject:** Pre-survey notification
**Attachments:** Hrbr_DiveShop_Notifications.pdf

Good morning Shawn,

Per our geophysical notification requirements by California State Lands Commission (CSLC), I am submitting to you the attached notice for posting.

Please contact me if you have any questions or require further information.

Thank you and Have a great day!

Bradi

Kind regards,
Fugro Pelagos, Inc

Bradi Villegas
Administrative Assistant Marine Survey Ventura

T+805-289-3849 | F+805-658-6679
bvillegas@fugro.com | www.fugro.com
4820 McGrath St. Suite 100, Ventura, CA 93003, USA

California Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE

# SCIENTIFIC COLLECTING PERMIT AMENDMENT FORM

DocID: D-0012248150-3
Trans: 9206817 10/06/14 15:04
Outlet: 310001-001 Fee: $104.29
2014 Sci. Collecting Amendment Fee
See permit for validity dates.

**2014 AMENDMENT FEE -** ☐ **INDIVIDUAL OR ENTITY - $104.29*** ☐ **STUDENT - $26.01***

Fee includes a nonrefundable three percent (3%) application fee, not to exceed $7.50 per item. (Section 700.4, Title 14, California Code of Regulations (CCR)).
If your permit is an "Individual", "Entity" or "Student" Permit, you are required to submit a completed amendment form when requesting a change to an existing Scientific Collecting Permit or when your affiliation changes. For an entity with multiple Principal Scientific Investigators (PI's), this fee is required for each PI who is making changes to their employee or volunteer list.

**DEPARTMENT USE ONLY**

| THIS AMENDMENT IS VALID: | PERMANENT ID NUMBER | # OF PI's |
|---|---|---|
| FROM ____/____/____ THROUGH ____/____/____ | SC- 12730 | |

**BEFORE COMPLETING AMENDMENT:** Read instructions on this form and the permit descriptions, mandatory conditions, and number authorizations on the current Scientific Collecting Permit (SCP) Application www.dfg.ca.gov/licensing/forms/. **Complete all appropriate portions of the amendment form.** If the Department returns this amendment, it becomes part of and must be attached to your valid, existing SCP and carried with you while collecting. Type or print clearly.

## SECTION 1 - INDIVIDUAL PERMITTEE INFORMATION - Complete only if original SCP was issued to an individual.

| FIRST NAME | M.I | LAST NAME | GO ID NUMBER (FROM ALDS ISSUED LICENSE) |
|---|---|---|---|
| | | | |

| AFFILIATION | ☐ Check here if you want future correspondence mailed to your affiliation | TITLE | DATE OF BIRTH |
|---|---|---|---|
| | | | |

| PERMITTEE'S MAILING ADDRESS | DAY TELEPHONE | FAX NUMBER |
|---|---|---|
| | | |

| CITY | STATE | ZIP CODE | E-MAIL ADDRESS |
|---|---|---|---|
| | | | |

| AFFILIATION'S MAILING ADDRESS | CITY | STATE | ZIP CODE |
|---|---|---|---|
| | | | |

## SECTION 2 - ENTITY PERMITTEE INFORMATION - Complete only if you are requesting changes to your SCP and/or need to add or remove individuals from the list of employees or volunteers conducting activities on your SCP.

| ENTITY'S NAME | GO ID NUMBER (FROM ALDS ISSUED LICENSE) |
|---|---|
| Pacific Gas and Electric Company | |

| ENTITY'S MAILING ADDRESS | DAY TELEPHONE | FAX NUMBER |
|---|---|---|
| P.O. Box 56 | (805) 781-9785 | (805) 781-9794 |

| CITY | STATE | ZIP CODE |
|---|---|---|
| Avila Beach | CA | 93424 |

PRINCIPAL SCIENTIFIC INVESTIGATOR INFORMATION - Provide the following information and attach a statement of qualifications or resume for the full-time permanent employee responsible for providing adequate supervision and training of the employees and volunteers listed below or on current SCP. Attach additional pages for each PI.

| FIRST NAME | M.I | LAST NAME | TITLE |
|---|---|---|---|
| Marcia | K | McLaren | Senior Seismologist |

| GO ID NUMBER (FROM ALDS ISSUED LICENSE) | DAY TELEPHONE | E-MAIL ADDRESS |
|---|---|---|
| | (415) 973-0543 | mkm2@pge.com |

List **ALL** employees or volunteers that you are adding or removing from the current SCP under the Principal Investigator named above. Attach a separate list if needed. An amendment form must be submitted, approved, and returned to you by the Department before you can add or remove employees or volunteers from the current SCP.

| FIRST NAME | LAST NAME | DRIVER'S LICENSE OR DMV ID NUMBER | STATE | MARK ONE | |
|---|---|---|---|---|---|
| | | | | ADD | REMOVE |
| | | | | ☐ | ☐ |
| | | | | ☐ | ☐ |
| | | | | ☐ | ☐ |
| | | | | ☐ | ☐ |

## FOR DEPARTMENT OF FISH AND WILDLIFE USE ONLY

| REVIEWED BY/DATE | TRANSACTION# | # OF PI's | LRB ROUTED TO/DATE |
|---|---|---|---|
| 10/1/14 | | | 1. MK 2. 3. |

10/16/14

California Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
# SCIENTIFIC COLLECTING PERMIT AMENDMENT FORM *(Continued)*

| FIRST NAME | M.I | LAST NAME OR ENTITY NAME *(If qualified entity)* | PERMANENT ID NUMBER |
|---|---|---|---|
| | | Pacific Gas and Electric Company | **SC-** 12730 |

## SECTION 3 – PERMIT INFORMATION

**USE OF PERMIT: CHECK ALL APPLICABLE BOXES**

☐ BIOLOGICAL CONSULTING (generally, catch and release only) ■ RESEARCH ☐ MUSEUM COLLECTION ☐ BIOLOGICAL COLLECTION SERVICE
☐ STATE, FEDERAL OR OTHER AGENCY BIOLOGIST ☐ EDUCATION ☐ OTHER _____

**Wildlife and Activity: Reminder - You must provide justification in Section 5 for each wildlife and activity circled here.**

Check the type of wildlife to be taken **AND** circle the type of activity requested: S=sacrifice; R=capture and release; C=take into captivity; SL=salvage; M=mark.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ☐ MAMMALS | S | R | C | SL | M | ☐ FRESHWATER FISHES | S | R | C | | M |
| ☐ BIRDS* *Other activity:* | S | R | C | SL | M | ☐ FRESHWATER INVERTEBRATES | S | R | C | | M |
| ☐ REPTILES | S | R | C | SL | M | ☐ ANADROMOUS FISHES | S | R | C | | M |
| ☐ AMPHIBIANS | S | R | C | SL | M | ☐ MARINE FISHES | S | R | C | SL | M |
| ☐ VERNAL POOL/TERRESTRIAL INVERTEBRATES | S | R | C | SL | M | ■ MARINE AQUATIC PLANTS | S | | C | SL | |
| ***See Standard Condition "K"** | | | | | | ■ MARINE/TIDAL INVERTEBRATES | S | R | C | SL | M |

**CHECK ONE:** Other SCP permittees are involved in activity or project. YES ☐ NO ■ *(If yes, list the permittees below. Attach separate list if needed.)*

| FIRST NAME | LAST NAME | SCIN NUMBER |
|---|---|---|
| | | **SC-** |
| | | **SC-** |
| | | **SC-** |

## SECTION 4 – SPONSOR INFORMATION

*Students, teachers and individuals collecting on behalf of an organization must all have one member of the organization sponsor them. Sponsors must fully complete this section of the application. Students must have one faculty member with affiliation to the student's college or university sponsor the student. Elementary and secondary school teachers must be sponsored by their principal. In some other cases, the Department may review an application and determine that a sponsor is needed and will request this information directly from the applicant or organization.*

| SPONSOR'S FIRST NAME | M.I. | LAST NAME | DAY TELEPHONE |
|---|---|---|---|
| | | | |

| TITLE | ORGANIZATION | E-MAIL ADDRESS |
|---|---|---|
| | | |

| MAILING ADDRESS | CITY | STATE | ZIP CODE |
|---|---|---|---|
| | | | |

**SPONSOR'S CERTIFICATION/SIGNATURE:** *I verify the take described in this application is required by this organization.* DATE

**X**

## APPLICATION CERTIFICATION

By checking **all** boxes, **I** hereby declare that the **following** information is provided in this amendment and in the justification section.

■ Purpose ■ Species + Numbers to be collected ■ Collection Locations ■ Species Disposition
■ Methods/Activity ■ Attached Federal/State Permit(s) (Applicable/Not Applicable – Circle appropriate one)

*I understand that if I fail to provide all information, circle items or check the boxes, my amendment may be denied. I certify that I have read, understand, and agree to abide by, all conditions of this amendment and attachments, the applicable provisions of the FGC, and the regulations promulgated thereto. I certify that I am not currently under any Fish and Wildlife license or permit revocation or suspension, and that there are no other legal or administrative proceedings pending that would disqualify me from obtaining this amendment. I agree that if I make any false statement as to any fact required as a prerequisite to the issuance of this amendment, the amendment is void and will be surrendered where purchased, and I understand that I may be subject to prosecution pursuant to FGC Section 1054 or to other administrative actions pursuant to Section 746, Title 14, of the CCR.*

**APPLICANT SIGNATURE:** DATE

**X**

California Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
**SCIENTIFIC COLLECTING PERMIT AMENDMENT FORM *(Continued)***

| FIRST NAME | M.I | LAST NAME OR BUSINESS NAME *(If qualified entity)* | PERMANENT ID NUMBER |
|---|---|---|---|
| Marcia McLaren | | Pacific Gas and Electric Company | **SC-** 12730 |

**SECTION 5 – PERMIT JUSTIFICATION –** Required for **ALL** activities.

Is a federal or additional state permit or MOU required? ■ YES ❑ NO
*(If yes, attach copies.)*

| PROVIDE START AND END DATE AND/OR EXPLAIN SEASONAL REQUIREMENTS FOR YOUR WORK. | START | END |
|---|---|---|
| | 10/15/2014 | 12/31/2024 |

**REMINDER - You must provide justification here for each wildlife and activity circled in Section 3.** Use the space below to summarize your proposed research. Be sure to include each of the following headers in **bold/underlined** and as follows: **purpose** (include scientific or educational need for the requested activity); **methods/techniques** (include equipment/gear) and the reason for using them; **species and numbers to be collected,** if known (include scientific and common names); **collection locations** (include counties and specific locales and reasons for choosing them); and **disposition,** which describes the organism's fate (i.e. sacrifice, catch and release, salvage, captivity). If you propose to collect in a Marine Protected Area (MPA), give the proper name of the MPA and explain (1) Why collection is required within an MPA and provide justification for why it can not be conducted outside of an MPA; (2) Why the proposed methods are appropriate for this activity; and (3) Describe the frequency of the proposed activity per collecting area. If you are working in areas where special status species (listed, fully protected, or species of special concern) are expected to be incidentally captured, explain why collection is required in these areas, and describe how your methods/techniques and equipment/gear will avoid or minimize take of non-target sensitive species. If requesting marking/tagging, captivity, or sacrifice, specific details as described above must be included for each species and activity requested. Note: If you are working in areas where special status species are expected to be incidentally captured, you shall include such anticipated species in your list. **Attach additional pages if needed. Attach complete copies of appropriate federal permits and additional State permits (e.g., Memorandum of Understanding) to avoid delay of processing.**

See Attachment 1 for Permit Justification.

See Attachment 2 for M/V Surveyor Vessel Specifications.

See Attachment 3 for Coastal Development Permit (CDP) E-11-017 dated January 15, 2013 granted to PG&E for the installation and operation of an array of short- and long-term seismic activity monitoring devices on the seafloor. On September 18, 2014 PG&E submitted a CDP amendment request for permit E-11-017 for the activities discussed in Attachment 1. As of September 30, 2014, this CDP Amendment Request is under review with the California Coastal Commission.

See Attachment 4 for General Lease – Data Collection Use, No. PRC 8985.1, issued to PG&E for the installation, operation, and maintenance of four temporary and four long-term ocean bottom seismometers and an approximately 11.4 mile long, two-inch diameter power and data transfer cable. This lease was authorized by the California State Lands Commission (CSLC) at its March 29, 2012 meeting. By PG&E letter (DCL-2014-608), dated April 29, 2014, PG&E submitted a complete aplication to amend Lease PRC 8985.1. On May 27, 2014, the CSLC sent PG&E two copies of the amended lease for review and signature. By PG&E letter dated June 17, 2014, PG&E signed and returned amended Lease PRC 8985.1 to the CSLC (see Attachment 5). On September 17, 2014 PG&E submitted a request for a letter of non-objection from the CSLC for activities discussed in Attachment 1. As of September 30, 2014, PG&E is awaiting response from the CSLC.

See Attachment 6 for Department of the Army Nationwide Permit No 5. Verification issued to PG&E March 8, 2013 for the installation, operation, and maintenance of four temporary and four long-term ocean bottom seismometers and an approximately 11.4 mile long, two-inch diameter power and data transfer cable. This verification is valid through March 18, 2017. On September 30, 2014 PG&E submitted an application for authorization under Nationwide Permit No. 5 for the activities discussed in attachment 1. As of September 30, 2014, PG&E is awaiting response from the U.S. Army Corps of Engineers.

California Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
**SCIENTIFIC COLLECTING PERMIT AMENDMENT FORM *(Continued)***

| FIRST NAME | M.I | LAST NAME OR BUSINESS NAME *(If qualified entity)* | PERMANENT ID NUMBER |
|---|---|---|---|
| | | Pacific Gas and Electric Company | **SC-** 12730 |

**FOR DEPARTMENT OF FISH AND WILDLIFE USE ONLY**

| | |
|---|---|
| ☑ _____PAGES OF ATTACHMENTS NOTED IN THIS PERMIT SHALL REMAIN WITH THIS PERMIT AT ALL TIMES. CONDITIONS, AUTHORIZATIONS, AND APPROVALS ARE AS FOLLOWS: | ISSUED BY/DATE |

| DEPARTMENT REVIEWER(S) SIGNATURE | | |
|---|---|---|
| 1. | 2. | 3. |

# Attachment 1
## Entity Scientific Collecting Permit Amendment Form

**SECTION 5 - PERMIT JUSTIFICATION -** Required for **ALL** activities

*Use the space below to summarize your proposed research, as follows: purpose (include scientific or educational need for the requested activity); methods/techniques (include equipment/gear) and the reason for using them; species or groupings and numbers to be collected, if known (include scientific and common names); and collection locations (include counties and specific locales and reasons for choosing them). If you propose to collect in a marine protected area (MPA), give the proper name of the MPA and explain why collection is required within the MPA. If you are working in areas where special status species (listed, fully protected, or species of special concern) are expected to be incidentally captured, explain why collection is required in these areas, and describe how your methods/techniques and equipment/gear will avoid or minimize take of non-target sensitive species. If requesting standard exceptions, marking/tagging, captivity, or sacrifice, specific details as described above must be included for each species and activity requested. Also list all standard exceptions and/or non-standard methods (see Mandatory Conditions/Numbered Authorizations) in tabular format, along with the information requested above. Note: If you are working in areas where special status species are expected to be incidentally captured, you shall include such anticipated species in your list of standard exceptions. You may be asked to provide a detailed study proposal for standard exception species during the review process. Attach additional pages if needed.*

The following provides the information requested in Section 5 of the FB Form 1379e (Scientific Collecting Permit Amendment Form) which is in support of a request for an Entity Permit for Pacific Gas & Electric Company (PG&E).

### INTRODUCTION

The following provides a description of Pacific Gas and Electric Company's (PG&E) proposed re-deployment of two temporary ocean bottom seismometer (OBS) units and deployment of two additional temporary OBS units offshore from the Diablo Canyon Power Plant (DCPP), located along the south-central coast of California (Figure 1). These temporary units are proposed to facilitate continued collection of seismic data along the Hosgri and Shoreline faults until repairs can be made to the long-term array that was installed in 2013. The long-term array is currently inoperable due to a damaged power/data cable.

### PROPOSED ACTIVITIES

The proposed temporary OBS units (Figure 2) will be self-contained units each comprising of digitizers, data loggers, and lithium ion batteries. The units will be approximately 3 feet (ft.) by 2 ft. (815 millimeters [mm] by 520 mm) and weigh approximately 220 pounds (lbs.) (100 kilograms [kg]). The OBS units will collect data similar to what was being collected by the four long-term OBS units prior to the cable failing. Each OBS unit will be attached to an acoustical retrieval device (Figure 3), which is approximately 2 ft. by 2 ft. (600 mm by 600 mm). The instruments will be deployed at the four temporary OBS locations shown in Figure 1. Each temporary OBS unit with acoustical retrieval system will cover approximately 10 square ft. ($ft^2$) (1 meter square [$m^2$]) of sedimentary seafloor.

PG&E proposes the redeployment of the temporary OBS units at these locations based on the following factors:

1. keeping the instruments within the State's 3-Mile Limit to preclude potential interference with commercial trawling activities;
2. placing all OBS units onto sedimentary seafloor habitat to reduce impacts to sensitive rocky reef habitats; and
3. positioning the OBS units in the best locations to record earth movements from the Hosgri and Shoreline fault zones.

**TRANSPORTATION AND INSTALLATION PROCEDURES AND METHODS**

The temporary OBS units will be transported to Morro Bay via an 18-wheel diesel truck-trailer. Upon arrival at the Morro Bay mobilization site, the OBS units will be tested and placed onto the primary vessel (marine vessel [MV] *Surveyor*) using an onboard crane, then transported to the project area located offshore of the DCPP.

The MV *Surveyor* is a 30 meter (m)- (100 ft-) long, steel-hulled work boat owned and operated by Maritime Logistics of Morro Bay, California (refer to Attachment 2 for additional information on this vessel).

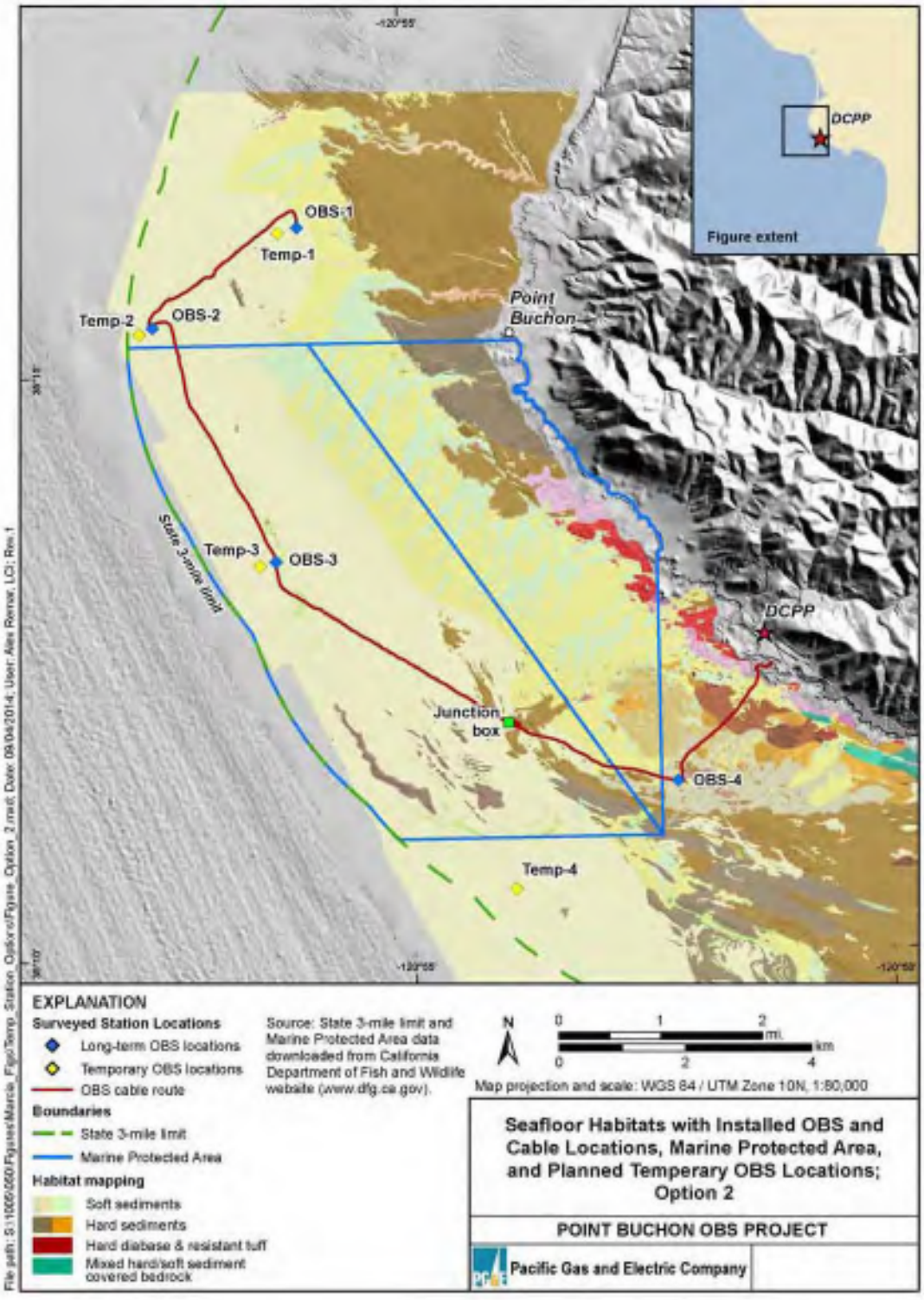



**Figure 1: Proposed Locations for the Redeployment of Temporary Ocean-Bottom Seismometer Units**

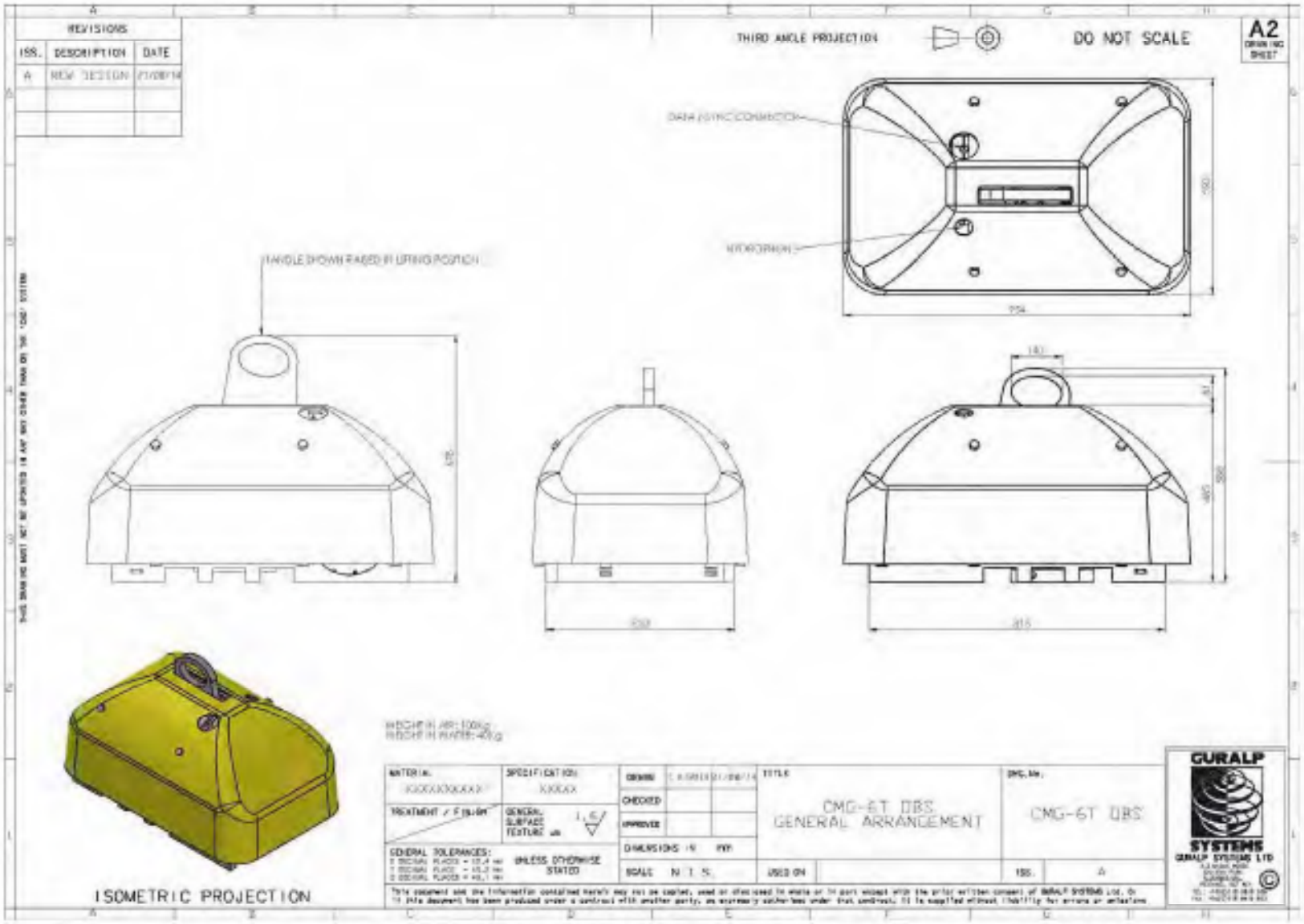



**Figure 2: Proposed Temporary Ocean-Bottom Seismometer Units**

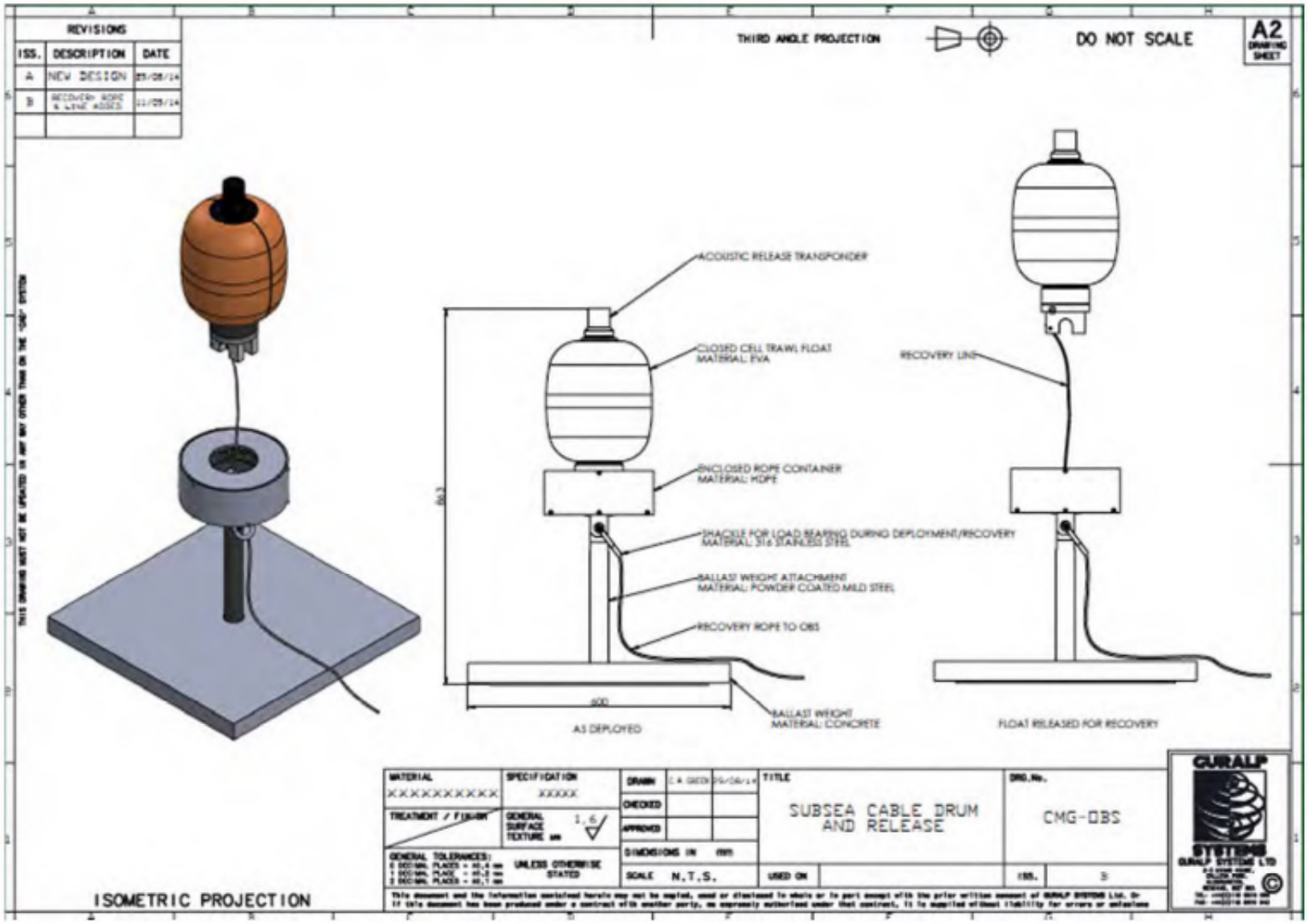



**Figure 3: Acoustical Retrieval System**

**Installation of Temporary OBS Units**

As noted above, the temporary OBS units will be mobilized in Morro Bay, loaded onboard the MV *Surveyor*, and taken to the offshore project area. Once onsite, each temporary OBS unit will be rigged to the 11-ton crane and lowered into the water at the pre-plotted locations shown in Figure 1. Installation of the temporary OBS units will be completed when sea state and weather conditions are conducive to safe operations and will be via "live boat" (no anchoring is proposed). Installation locations will be located using real time global positioning system (GPS) survey equipment on board the MV *Surveyor* with the assistance of a remotely-operated vehicle (ROV). The GPS equipment can position the temporary OBS units within 3 to 7 ft. (1 to 2 m) of the planned locations.

Prior to installation, each temporary OBS unit will be attached to an acoustical release device (Figure 3). To recover and service the temporary OBS units, the MV *Surveyor* will return to the site and the acoustic releases will be signaled to release a buoy attached to a ballast weight by a 0.1-inch (3.5 mm) diameter Kevlar rope. The ballast weight will be attached to the temporary OBS unit by a 0.5-inch (12 mm) diameter polyester braided line. Lines attached to the ballast weight will facilitate recovery of the temporary OBS units. Once the buoy is retrieved by the deck crew, the onboard winch will be used to recover the ballast weight and temporary OBS unit from the seafloor and placed onboard the MV *Surveyor*.

The temporary OBS units will be recovered and redeployed no later than six months to replace batteries and to retrieve data. The temporary OBS units will also be recovered to retrieve data following a significant seismic activity. The temporary OBS units will remain in place until the long-term OBS array is repaired and deemed fully operational. No debris will be left on the seafloor when the temporary OBS units are permanently removed.

**Post-Lay Survey**

An ROV survey will be completed in concurrence with the initial OBS unit deployment to record the location of and confirm seafloor habitats disturbed by the four OBS units. ROV survey activities will be completed by a CSLC geophysical permit holder and all activities will be in-accordance with the CSLC permit requirements. During subsequent servicing of the OBS units, an ROV will only be used if warranted by the surrounding habitat.

**Project Schedule**

It is anticipated that installation of the temporary OBS units will begin in on October 15, 2014. Deployment is expected to take approximately three to four days to complete.

**Personnel Requirements**

PG&E estimates that 12 personnel will be required for OBS unit installation:

- MV *Surveyor* crew: 5
- Onboard OBS service crew: 4
- Marine surveyor 1
- Onboard marine wildlife monitor 1
- PG&E Representative 1

### Equipment Requirements

Most of the equipment required to install the temporary OBS units will already be onboard the MV *Surveyor*, and will consist of an existing hydraulic crane, A-frame, and positioning system.

## DEPLOYMENT PROCEDURES AND NOTIFICATIONS

The following deployment procedures and notifications will be made during the initial deployment of the OBS units and all subsequent servicing of these temporary units.

### Marine Wildlife Monitoring

A qualified marine wildlife monitor, approved by the National Oceanic and Atmospheric Administration (NOAA) Fisheries, will be onboard the vessel throughout the period of the vessel transit and OBS placement. During transit between the Port of Morro Bay and the project area, a marine wildlife monitor will be positioned on the vessel so that the monitor will have a clear view of the area of ocean that is in the direction of the course of travel in order to observe marine mammals/turtles and to institute measures to avoid potential collisions with marine wildlife. In general, the vessel will maintain a minimum distance of at least 100 m (330 ft.) from marine wildlife to minimize the chance of collision or disturbance. This distance exceeds the recommended distance set by the NOAA Fisheries, which suggests a distance of 100 yards (300 ft.) from whales; no minimum distance is specified for marine reptiles.

In addition to the measures discussed above, the following operation-related actions will be implemented:

(1) Onboard monitoring will be completed by a qualified marine wildlife monitor who will be located at a high vantage point onboard the vessel and will use binoculars to observe marine wildlife throughout the period of the project.
(2) All operations will be completed during daylight to maximize marine wildlife observations and the institution of other mitigation measures.
(3) The onboard marine wildlife monitor shall observe and record the presence of marine wildlife (mammals and reptiles) during the deployment of the OBS units and shall have the authority to advise changes in operations if the actions are resulting in potentially significant impacts to the wildlife, if those actions will not jeopardize vessel or crew safety.
(4) The onboard marine wildlife monitor will record all observations of marine mammals and reptiles including, where possible, the species, number of individuals, behavior, distance from the vessel, and direction of movement. Actions taken when an animal is observed within the project and the results of those actions will also be recorded.
(5) The onboard marine wildlife monitor will have a current Scientific Collecting Permit onboard that is issued to the monitor for this project.

A project-specific Marine Wildlife Contingency Plan (MWCP) will be developed 21 days prior to the start of the project and will address marine wildlife that may occur in the project area and what mitigation measures will be required to minimize potential impacts to marine wildlife. The MWCP will be submitted to the California State Lands Commission (CSLC) by PG&E for review. Upon completion of the initial deployments and each subsequent servicing of the temporary

OBS units, a monitoring report will be provided to the CSLC to document compliance with project permit requirements and observed wildlife activity.

**Species and Numbers to be Collected and MPA Issues**

The objective of the proposed project is to collect data on two submarine faults that are offshore of DCPP. The proposed locations for the temporary OBS units have been selected based on the trend of those faults (see Figure 1), which is generally north-south within the marine protected area (MPA). As shown in Figure 1, one temporary OBS unit will be placed within the MPA. The "take" aspects of the proposed actions are related to the sedimentary habitat-associated epibiota and infauna that will be covered by the OBS unit.

Although present (i.e. marine mammals, steelhead, and the black abalone), no special status species within the MPA or throughout the project site are expected to be affected by the proposed actions. A list of anticipated species that are expected to affected is provided below:

- Seapens: *Stylatula* sp. and *S. elongata*, *Ptilosarcus gurneyi, Acanthoptilum* sp.
- Seastars: *Asterina miniata*, *Mediaster aequalis*, *Pisaster giganteus* and *P. brevispinus*
- Sea Cucumbers: *Parastichopus* spp.
- Anemones: Various burrowing anemones
- Polychaete worms: Various tube worms (i.e. *Diopatra ornata*)
- Mollusks: Various small gastropods (i.e. *Kelletia kelletii*) and small clams.

Fish are expected to move out of the area during OBS unit placement and therefore no fish are expected in the "take" for the project. Also, because of the water depth range (50 to 100 m [165 to 330 ft.]) of that portion of the project that is within the Point Buchon MPA, no algae or sea grasses are expected to be affected by the proposed actions.

The "take" under the temporary OBS units is expected to be short-term and natural repopulation of the affected sedimentary habitat is expected to occur within six months of removal of the units. An ROV survey will be completed in concurrence with the initial OBS unit deployment to record the location of and confirm seafloor habitats disturbed by the temporary OBS units.

# ATTACHMENT 2

# MARITIME LOGISTICS

P.O. Box 426 Creston CA. 93432
805-431-7393

# M/V SURVEYOR

**The M/V SURVEYOR was built by Universal Iron Works, in Houma, Louisiana in late 1972 as an Offshore Supply Vessel. The general overall arrangement is a typical of Gulf offshore crew/supply/utility vessel with the cabin well forward and open aft deck. She has an over all length of 100' 9" and her registered dimensions are Length 92.8 x Breadth 24 x Depth 10.3 with an approximate draft of 7' and a clear deck area of 912 sq. ft. which according to her stability letter will accommodate a 54 long ton deck load. The hull is subdivided by 8 transversely framed water tight bulkheads and one longitudinally ¼" steel bulkhead welded on 3x4 L frames with approximate 24" spacing. Shell plating at sides and decks are 5/16" with a 3/8" bottom. She is subdivided with an anchor locker forward, followed by a storage void, then port and starboard ballast, followed by potable water and fuel oil tankage, then the engine room, aft ballast tanks, and steerage room. Her gulf style house contains berthing and common area accommodations below with additional berthing for 14, galley, navigations room and full width helm forward. Aft of the house opens to clear decks aft and an A Frame mounted at the stern and a crane on the starboard aft rail. She has recently undergone upgrades to her engines, re-issue of her COI for 20 Passengers + 4 crew in accordance with Subchapter T, and carries as stability letter.**

## Principal Characteristics

| | | | |
|---|---|---|---|
| Length (oa): | 100' | Length (wl): | 92 |
| Beam: | 25 | Draft: | 7' |
| Load Deck: | 912 sq. ft. | Deck Cargo: | 54 Long tons (120,960#) |
| Passenger Cap: | 20 max | Berths: | 14 total (5 crew 9 riders) |
| Operating Crew: | 4 to 5 | COI Range: | Oceans |
| Total Ballast: | gal | Fresh Water | 3,400 gal |
| Fuel cap: | 10,300 gal. | Range: | 3,000 Miles |
| Cruising speed: | 8.5 knots | Max speed: | 11 knots |

## Machinery

| | |
|---|---|
| Main engine: | (2) Detroit Diesel, 16V - 71 |
| Main Horsepower | 600 hp. Ea, 1200 hp total @1800 rpm. |
| Generators: | 2ea, tier 2 Cummins Onan 60kw John Deer powered gen's installed 5/2009 |
| Transmissions | Twin Disc MG521 - 3:1 reduction |
| Air | 1 Quincy, two stage compressors, 1 Rotary screw 85 CFM compressor |
| Propellers: | 2 each 45 diameter x 33 pitch |
| Shafts: | stainless steel |
| Hydraulics | 70gpm pumps running off of each generator new installed 5/2009 |

## Deck equipment

| | |
|---|---|
| Crane | Hydraulic Ramey knuckle crane 2000# all radius SWL |
| A Frame | Five ton max capacity |

Assorted small deck winches and pullers available upon request

## Safety and Navigation

| | | | | |
|---|---|---|---|---|
| Radar: | #1 JRC | JMA2344 - 72 mile | #2 JRC | JMA2344- 72 mile |
| SSB: | # 1 ICOM | IC – M 700 Pro | #2 ICOM | IC – M 700 Pro |
| GPS: | #1 JRC | JLR-10 compass | #2 Garman | GPS Map 128 |
| AIS | #1 JRC | | | |

| | | |
|---|---|---|
| Fathometer: | JRC | Plot 500F with transducer & GPS |
| Autopilot | Simrad | AP50 installed April 2009 |
| VHF: | #1 JRC JHS-32A GMDSS radio telephone #2&#3 Standard with DSC | |
| Compasses | Sperry / Ritchie | |
| Alarms | General | Engine High-water temp / Bilge / low oil / eng, temp |

| | | |
|---|---|---|
| Elect, plotting | Nobeltec Admiral with MapTech charts | |
| EPIRB | ACR | Satellite 406 |
| Life raft | 1 each | 25 man SOLAS - A |
| Life float | 1 each | 22 man Cal-June |
| Life Rings | 3 USCG approved 2 with lights | |
| Life jackets: | 35 Adult 4 Child | |
| Life sling: | 1 Life Sling brand | |

## Miscellaneous

| | | | |
|---|---|---|---|
| Sleeping berths: | (14 total ) | Full Galley: | YES |
| TV: | (2) | DVD player: | (1) |
| Shower: | (1) | Toilet: | (1) |
| Hot water | A.O. Smith 50 gallon electric | | |
| Holding tank | CHT water 325 gallons | | |


SURVEYOR

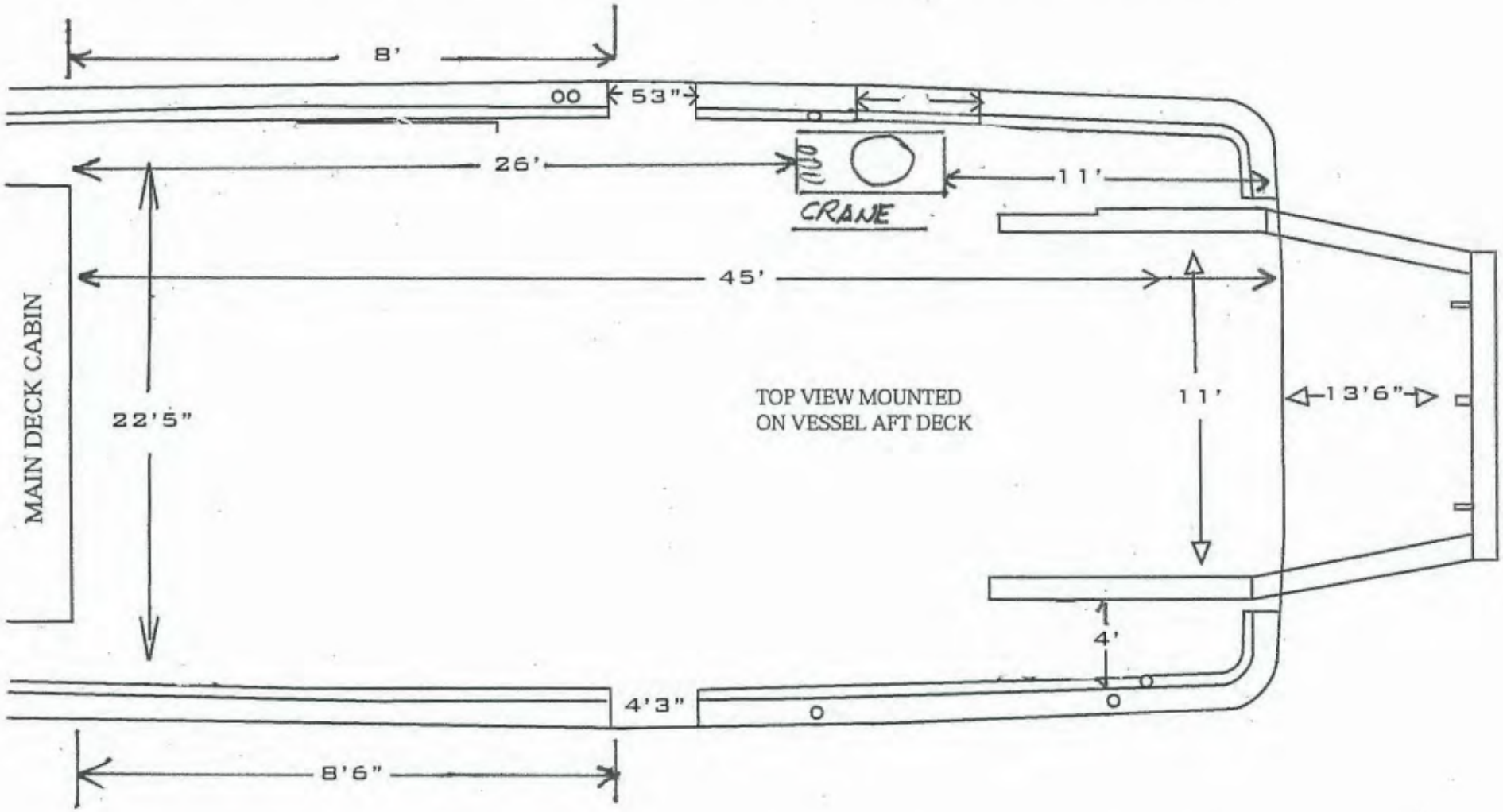

SURVEYOR


SURVEYOR


WARNING


ATTENTION

# M/V SURVEYOR LOAD DECK CONFIGURATION

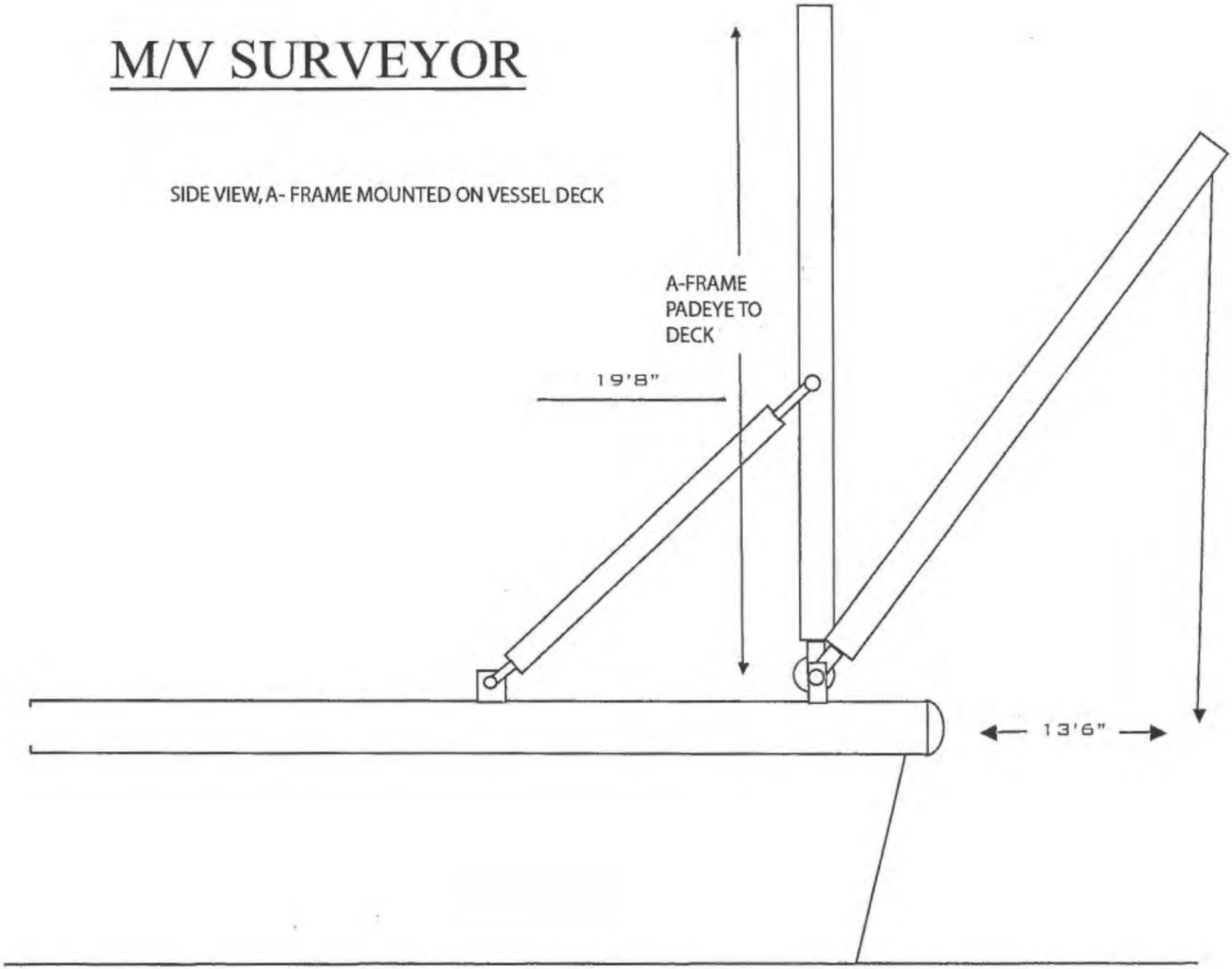



A-FRAME CONFIGURATION
MAXIMUM INTEDED CAPACITY 5 TONS

MARITIME LOGISTICS
P.O BOX 426 Creston Ca. 93432
805-431-7393

# M/V SURVEYOR

SIDE VIEW, A- FRAME MOUNTED ON VESSEL DECK



STATE OF CALIFORNIA
DEPARTMENT OF FISH AND GAME
10/6/2014 3:04 PM
CDFW License and Revenue Branch
Outlet No: 310001-001
Clerk: RLEE

**Purchase Receipt**
Trans #9206817

MARCIA K MCLAREN
GO ID: 1029367794

| Item Name | Amount |
|---|---|
| Sci. Collecting Amendment Fee | 104.29 |

Customer Total: $104.29

**DFG Item Fees SubTotal:** **$104.29**
**Transaction Total:** **$104.29**

CREDIT CARD 032870

$104.29
Tender Amount: $104.29
CHANGE: ( $0.00 )
Total Amount: $104.29